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SCIENCE IN MEDICINE AND RELATED FIELDS*

VANNEVAR BUSH, Eng.D.

President, Carnegie Institution of Washington

IT IS pleasant to join again with a medical group, and particularly pleasant to consider with you some of the present trends in the application of science to your profession.

My first indoctrination in the field of medical research occurred during the War when Franklin D. Roosevelt placed the Committee on Medical Research in the Office of Scientific Research and Development, for which I was responsible. It was a stimulating experience and I learned much. My education in matters medical undoubtedly left something to be desired, but I certainly found out a great deal about medical men. The experience, let me say at once, was a happy one, and we remained friends throughout the period of our association. But at first we approached our common problems from widely different points of view, and it required an effort to adjust our different ways of looking at things, as a broad program of medical research under the auspices of Government was instituted. In retrospect I am sure we all feel that the results were salutary and the effort very much worth while. The success of our alliance was largely due to the generous way in which medical men everywhere sacrificed their normal interests and became members of a team, working as one for the national defense. It was also due to the coordinating efforts of a group of devoted men under the leadership of that grand patriarch of medical science, A. Newton Richards. I wish that I could go on and pay tribute to all who helped in advancing the program.

Those war years of intense medical research effort, concentrated especially on subjects connected with the health of troops and the adequate handling of casualties in the field, stepped up the tempo of our medical research in this country in many related fields; and this tempo is being sustained through the present uneasy years of peace. This quickening of research has resulted not merely from the appropriation of Federal funds in large amounts for the support of research but from other causes as well. The spectacular successes in the application of science to war purposes—radar, proximity fuzes, atomic bombs—created a general realization among the public, for the first time, of the power of applied science. Among thinking men, who already realized this power, there was also an appreciation of the additional possibilities for accomplishment that lie in organizing a concerted attack upon certain classes of problems. The new attitude toward science generally appeared also throughout the field of medicine, as it was bound to appear in the light of advances made in such subjects as blood fractions, antibiotics, insecticides, and surgical technics.

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* Address delivered before the Twenty-third Annual Scientific Assembly of the Medical Society of the District of Columbia at its Annual Dinner, October 1, 1952.

The continued high level of scientific effort since the War has been on the whole fruitful, as progress in all sorts of medical subjects attests. Yet there are dangers that accompany rapidly expanded programs; and I should like to talk to you about some of these, rather than merely discuss the much more satisfying subject of present and prospective accomplishments.

We still devote a large part of our research in this country to military purposes. This is less true in medicine than in other fields, especially in such new fields as electronics. Much of our present research is secret, and secrecy and scientific progress do not go well together for many reasons. Fortunately, the great bulk of medical research has been open and published even during the War. This is as it should be. Yet there are areas necessarily pursued in secret which must not be neglected. One cannot listen to the raucous and absurd charges of biological warfare shouted to the world from Moscow without realizing that we live in dangerous times, when the pursuit of our peaceful ends depends entirely upon our ability to defend ourselves against every sort of attack. We cannot slacken our efforts to understand and prepare defenses against the potential use of biological methods in making war, much as we shrink from the thought of such depravity in the human race. Medical men along with men of other professions have a continuing duty, under the threat that constantly looms over us, to help keep our powder dry and our youth well armed.

But national defense is not my subject tonight. For even when a sufficient part of our medical research is devoted to problems connected with defense, the great range of the effort remains free and open, devoted broadly to the welfare of the race and not merely to possible war.

There are dangers in the magnitude and intensity of the present research programs quite apart from their relation to the defense effort. For one thing, there is danger of overextension and consequent support of the mediocre and the inconsequential. The harm done here is not merely in the waste of money and of human effort; absurd research efforts tend to bring discredit to worthy efforts. All of us have seen programs which are trivial even to casual inspection, and, worse, we have seen honest men devoting their full efforts to them. One of the inevitable problems of expanded effort is to minimize this waste without interfering with the free choice of subject so essential to progress for the independent and able investigator. It is, moreover, exceedingly difficult to determine in the early stages of any research what is worth while and what is not. One of the primary marks of scientific genius is the ability to discern, in a subject which appears to be in utter confusion, the lines of research that will be fruitful.

Another danger of Government support and great expansion in research is that of regimentation and bureaucratic control. In my opinion we have done very well since the War in avoiding this danger, considering the large amounts of Federal money which have been poured into the support of scientific effort. For those who have been in administrative governmental posts have been generally wise in recognizing the dangers and have consciously avoided them. Scientific programs have been judged, as a rule, by competent committees and have not been at the mercy or the whim of Government officials; and the conduct of the programs has been on a high plane. Yet this happy circumstance should not blind us to the continuing presence of the danger and to the fact that the country is still inexperienced in its use of Federal funds for the support of science.

To a group of medical men I certainly do not need to expand upon the dangers of regimentation. Eternal vigilance is the price of our liberty here as elsewhere. The freedom of science, as it pursues its way for the increase of knowledge to benefit mankind, is just as essential to our national well-being as is the preservation of a system of medical practice which maintains those traditions of the relation between doctor and patient under which we have thus far prospered. There is no inevitable departure from these ideals as the basis of support shifts. But we shall do well to remain alert.

Some of the dangers of our present, enlarged effort arise from a misconception of the methods by which science becomes usefully applied. The most effective form of scientific effort, the most workable organization for its furtherance, is in marked contrast to the form that is suitable for the building of a bridge or the manufacture of a refrigerator; and this contrast is not always realized by those who have never engaged in a concerted scientific program. How many times since the War have I heard the exclamation, "Scientists and engineers spent a couple of billion dollars and made an atomic bomb; why isn't the same thing done to clear up the cancer problem?" There could hardly be a sharper contrast. The effort on atomic fission was based on a half century of basic scientific work, as a result of which there was a relatively straight path clear to our objective. There were scientific relations that were unknown, answers that were needed, of course; but the questions were precise and fairly understood; and the steps necessary to answer them were apparent. After that all that was required was a closely organized, large-scale effort on the part of physicists, chemists, engineers, and industrialists, the building of great plants, and the vigorous pursuit of a unified, coherent plan. To say this is not to detract in any way from the credit due those who accomplished a great task in an extraordinarily short time. But the making of a bomb is a vastly different thing from the problem we face when an attack on cancer is contemplated. Our understanding of the functioning of the human mechanism is far from complete. It is, in fact, quite fragmentary and disconnected. At every point of approach it is full of mystery; and even the simplest aspects of the complex chemical, mechanical, electrical mechanism which we call a human body are seldom reducible to formulae of computation. In a broken field of this sort, where guideposts are few and there is no clear path whatever to end results, progress depends upon men and ideas and not on complex human interrelations in an organization. The primary need is to find the really great research scientists with an intense interest in parts of the problem and see to it that they have every possible support as they work, on their own ideas and in their own manner, without administrative interference or control of any sort. Moreover, these men may be working on subjects which seem to be far from the immediate problem, examining an obscure relationship which does not seem, to the layman, to bear at all upon the immediate question of treatment or cure. For the most fundamental scientific research an absolute minimum of organization is the desideratum, and this organization should be devoted to freeing the real pioneer from distraction or interruption. The key to the matter here is the location of those researchers worthy of this type of support, and the only basis for their selection is the considered judgment of their colleagues and scientific peers.

I do not mean to say that careful organization has no place in scientific research. Once the path is clear, there must be organization to focus effort, especially when research turns to its applied aspects with a definite end in view. Research in the early days on penicillin, for example, before its power was known, required the efforts of independent men who could grasp the notable phenomenon and pursue it when it was still obscure—and this occurred as we know through the work of Fleming and Florey. But once it was known what penicillin could do, and how it appeared in nature, only the organized, concerted effort which it received in this country, largely by reason of the activities of pharmaceutical companies, could render it a useful, available material for the conquest of disease, and the forerunner of a whole series of antibiotics, the power of which has, even now, not been fully exploited. Organization is salutary in its place, and organization of research especially so; but it can do great harm where misapplied; and there are not many who understand it fully.

I would speak of one more difficulty. It appears in every field of scientific effort today, but especially in the field of medical research and research in those adjacent fields on which medical science and practice depend: biology, chemistry, and even such supporting fields as electronics. This is the danger of overspecialization.

The difficulty would have appeared even if there had not been an accelerated surge in medical research. It is inherent in the subject. The human mechanism is too complex for one man to grasp in all of its ramifications and intricate detail. As our knowledge has grown, it has accordingly become divergent and fragmentary.

Every scientist feels acutely today the effects of overspecialization. The volume of publication is so vast that it is impossible to keep abreast of it, even as the field of interest is narrowed. Whole new sciences and branches of engineering appear, with their specialized societies and journals. Intensely progressive gatherings of research workers develop their own jargon, unintelligible except to the initiated, heightening the barriers which separate their work from the main stream of progress.

We are told that, long ago, there was a strange sort of real estate development. My memory of what I learned about it in my youth is somewhat hazy. But it seems that there was a project to construct some sort of Empire State Building, only much larger and more grandiose, reaching up toward the sky and mingling with the clouds. It was called the Tower of Babel. As the story goes, it was never completed, for the plans ended in confusion. The workmen suddenly found that each one was speaking a special language and that no man understood what the other was saying. So the minor construction went on piece by piece, but none of the pieces fitted; and the general plan of construction was completely lost. We are in danger, in science, of building a Tower of Babel.

This is especially true in the science that deals with man. For man is complex, with a complexity far exceeding that which was assumed in the early days, when the practice of medicine was a simple matter of applying empirical experience, and the science of medicine was nonexistent. As we have learned more, so have we learned that there is vastly more to learn before any comprehensive over-all understanding can emerge. A unitary organism has been found to involve the widest possible range of science, in the interconnected phenomena by which it functions to maintain existence in its environment. Very subtle organic chemistry appears in connection with its hormonic system, its enzymes and vitamins, its antibodies, the nucleic acids of its genetic apparatus, and the metabolism of its proteins. A mysterious process by which a substance molds its surrounding medium into its own image transcends all that classic chemistry has to teach. In the chemistry of muscle, that process, unused by man in his artificial engines, whereby the energy of chemical combination is transformed directly into mechanical work, without the intervention of any other forms, leads us into thermodynamic and chemical considerations beyond our present comprehension. The electrochemistry of nerve action introduces relationships far more bizarre than those simple effects which man utilizes in his batteries or his electrometallurgy. And all this is affected, in completely ungrasped ways, by the functioning of a brain, which in its mere complexity reaches far beyond the relatively feeble electronic computing devices of which man is currently so proud, and which undoubtedly also involves phenomena the mere nature of which we cannot now specify or define, much less examine. The human system is unbelievably complex, and its examination by research calls for all the science that man has yet learned, and for much which is still a closed book.

All this gives zest to our endeavor. It renders the study of man by man the most challenging problem that man can conceive. There will be many researches, many papers, many lives lived, before there can emerge that integrated, complete understanding which alone can form a sound and adequate scientific base for the profession of medicine. And in the meantime we pursue individual paths, which continually diverge, which become daily more specialized; and there is danger that the pioneers on the boundary of knowledge will completely lose touch with one another, that we shall learn more and more about less and less, and that the grand design may be completely obscured by the inconsequential detail which we pile up before it.

I can give you no solution for the quandary in which we find ourselves. There is probably no single solution. But there are a number of things which would help.

For one thing, I feel that it is obvious that the present day calls for more versatility and breadth of understanding. The difficulty is to acquire these virtues without at the same time becoming superficial. I feel that in our education, not merely in the field of medicine but in all the professions, we need more emphasis on the ability to grasp, on learning to learn, with the sacrifice of a great deal of practical, detailed, factual knowledge; more dependence on ability to find and evaluate, and less on memory. For the facts presented to memory are today overwhelming in any profession, and the attempt to carry them all, even for a narrow field of practice, can lead only to mental indigestion and a stultifying of those qualities which distinguish a human brain from a book or an adding machine.

This leads to the thought that we need to give attention to the means by which our accumulated knowledge becomes stored and transmitted. The printed page, the library, the spoken word, the lecture—in the forms in which they have operated for centuries—are no longer adequate for the purpose. And we seem to be doing little to improve the means for gaining access to our accumulated knowledge, which is growing at a prodigious rate. The holdings of prominent university libraries have been doubling every 16 years for some time. The number of journals publishing results of original research runs into many thousands. The pace is now increased and especially marked in science. How many of you, for example, have time to keep up with the literature written in the various fields of medicine?

It is strange that we seem to be so baffled by this problem in these days of intense mechanization. Machinery, control devices, and instruments have entered many a field to make it possible to contend with growing intricacy of operation. A modern bank, a modern factory or refinery could not operate without this mechanization. Sorting machines, automatic controls, applied power, machines which make machines have enabled us to build our civilization to its present point of high individual productiveness, interrelationship, and standard of living. But these things have hardly touched as yet the ways in which we store and communicate our findings and our thoughts.

Books and journals published for a limited group such as yours are bound to be expensive; they cannot be produced by conventional means at prices that are easy to bear. This fact tends to reduce further the size of the group that can have easy access to them, however essential to your profession may be the information they contain. True, there are devices being built which will greatly decrease the cost of printing on paper. The day of metal type, which has served so long, may be nearing an end. New electronic photocomposition machines are beginning to produce books, and this is by no means the final step in a revolution of methods of printing.

We also have microfilm. With some of the refined types of film developed during the War it is no exaggeration to state that the Encyclopaedia Britannica could be compressed to the size of a matchbox. There are all sorts of useful but not revolutionary card-sorting processes, and the cards can carry microfilm. There is a little-used machine in existence, the rapid selector, which can review items on a strip of microfilm at the rate of 1,000 items a second and print out those which are selected in accordance with a code set on a keyboard. It could, for example, review the case histories of half a million hospital patients in 10 minutes and present for aid in diagnosis printed copies of the few cases which corresponded to an unusual set of symptoms and complications. I say it could, but as yet it does not.

We might profitably give some attention to our methods of indexing and cataloguing scientific literature. In an era of chemical physicists, physical chemists, biophysicists, biochemists, neurologists, neuropathologists, neurosurgeons, clinical psychiatrists, and so on, it is difficult to know how our knowledge ought to be classified, and how to thread our way through the classifications, once they are temporarily established, to find the information that we need. The rapid selector mentioned above will select according to an established code, but the code must be developed on a rational principle so that it can be effectively operated. No system of coding or of indexing under established subject heads can efficiently serve to guide us through the written thoughts or findings of scientists when the very science in which they work will not submit to definition. We can only wish—the optimists among us may hope—that a way will be found for converting into some form of mechanism the kind of fluid indexing and cataloguing that takes place in our minds. There is here a feature which man has not yet introduced into his machinery, a feature of great power, the pursuit of paths through a complex record by means of association of ideas. Modern electronics can do for us almost anything we ask in the way of rapid, involved operations upon masses of data. But we still tell our research findings to one another in much the same old way, and we record our research results in a mass of paper from which their extraction becomes increasingly laborious.

There are two very concrete things that we can do in the present situation that can help enormously. In the first place, we can school ourselves—all of us—to express ourselves so that what we have to communicate can be quickly and easily apprehended by others within our profession and in the nearly related professions. There is, as has recently been said, a moral obligation upon all of us to be intelligible. In the second place, we can take measures to encourage a few at least within our professions who have the native skill to gather together, summarize, and interpret the information developed by many different workers—who can make great masses of seemingly confused data clear, intelligible, and useful to their fellows. Men possessing this kind of skill are rare and need to be encouraged. In these hurried days their efforts in explaining where we are, where we are going, and what recent developments really mean, are utterly invaluable. I said a while ago that the most helpful thing that can be done to advance fundamental science is to find the truly gifted scientist and support him to the utmost. Let me repeat this for the individual who can integrate the current stream of emerging knowledge. Only too often his work does not receive the recognition it deserves, and his labors are performed at the sacrifice not only of his own career in strictly novel research but also of his scale of living, for the direct rewards of this sort of publication are not large. I wish there were more generous support for labor of this sort and more recognition for this type of attainment. Had I invented a new dynamite, and reaped a fortune from it, I should be inclined to establish a Nobel Prize for the integrator and interpreter of science, who can in these days often serve his fellows far more than the individual who merely adds one morsel to the growing, and often indigestible, pile of accumulated factual knowledge.

I have touched briefly upon some of the dangers and difficulties which attend us as the pace of scientific research is quickened and the field of knowledge expands into many new paths. These dangers are real, and we would do well to devote deep thought to their avoidance and to finding solutions for the problems they present. Still the most significant aspect of the present day in science is that we are going ahead energetically and accomplishing much, and it is invigorating to live in times when there is progress and action. It is far better that we should be embarrassed by the consequences of our rapid

(*Continued on page 58*)

A CRITICAL EVALUATION OF ANTICOAGULANT THERAPY IN THE TREATMENT OF ACUTE MYOCARDIAL INFARCTION*

HENRY I. RUSSEK, M.D., F.A.C.P.

Consultant Cardiologist, United States Public Health Service Hospital, Staten Island, New York

THE use of anticoagulants in the prevention and treatment of acute myocardial infarction was first suggested by Best and his co-workers[1, 2] in a report on a series of animal experiments in which they demonstrated that the incidence of artificially induced intravascular clots could be lowered dramatically by the use of heparin. The first American report concerned exclusively with the use of dicumarol in acute coronary artery occlusion appeared in December 1945, when Wright[3] described his experience with 76 patients. Between the time of that report and 1949, over 20 individual series of cases were published in the American literature. Although these early studies seemed consistently favorable, the results were in no instance based upon a sufficiently large series of properly controlled cases to warrant statistical analysis. These initial observations did, however, lead to the more extensive study carried out by the American Heart Association's Committee for the Evaluation of Anticoagulants in the Treatment of Coronary Occlusion with Mycoardial Infarction. This large scale investigation[4, 5, 6] at 16 leading hospital centers provided data for statistical analysis of 1,031 cases of acute myocardial infarction. Of this number, 442 received conventional treatment for coronary thrombosis, while 589 received heparin or dicumarol or both. The composition of the sample as to age, sex, and previous history was stated to be remarkably similar in the 2 groups. Of those patients not receiving anticoagulant therapy, 23.4 per cent died as compared to a mortality of 16.0 per cent in the group receiving this form of treatment. It appeared from these findings that approximately one third of the expected deaths was prevented by the administration of anticoagulant drugs. The reduction in mortality was attributed chiefly to a decrease in thrombo-embolic deaths from 10 per cent in the controls to 3 per cent in the treated patients.

Although independent studies reported in medical literature throughout the world have for the most part confirmed these important observations, some reluctance continues to exist in accepting the conclusions and statistical data embodied in these reports. In assessing the value of any form of treatment for acute myocardial infarction, it is essential that the treated series be compared with a like series of untreated controls. Some authors[7, 8] remain unconvinced that this basic requirement has been fulfilled in the studies thus far reported in the literature. They point out the great difficulty that exists in setting up a control study in a disease in which numerous factors such as age, sex, previous angina pectoris or infarction, shock, congestive heart failure, arrythmias and unrelated diseases exert an influence on prognosis. Others have challenged the alleged frequency of thrombo-embolic deaths stated to occur among patients not receiving anticoagulants. In Wright's control series more than 40 per cent of all the fatalities were attributed to this complication. This high incidence is at wide variance with figures reported from studies at necropsy. Although pulmonary embolism is the commonest of all fatal thrombo-embolic complications in this disease, Eppinger and Kennedy[9] found it to be the cause of death in only 6.5 per cent of 200 fatal cases and Hellerstein and Martin[10] in only 12 per cent of their series of 160 necropsies. The recent report of Miller and associates[11] has recorded an incidence of only 10 per cent for systemic and pulmonary arterial occlusion occurring as a major or lethal complication in 210 cases studied at autopsy. With this reported frequency, and even with a crude mortality rate as high as 40 or 50 per cent, fatal thrombo-embolism should be expected to occur in no more than 4 or 5 out of every 100 patients afflicted with acute myocardial infarction. Yet the Committee on Anticoagulants has reported the saving of 7 out of every 100 patients as a result of these drugs, admittedly without complete prevention of this complication. It would be difficult to accept the validity of this finding without assuming that anticoagulants have additional life-saving actions besides that of preventing thrombo-embolism. The belief is held by some that these agents prevent congestive failure, sudden ventricular fibrillation, and asystole by preventing clotting in the coronary lumen. Gilbert and Nalefski[12] have suggested that the favorable results observed from the use of anticoagulant drugs in cases of acute myocardial infarction and angina pectoris may be primarily the result of an increase in coronary blood flow. Graham and associates,[13] however, in reporting marked relief of anginal symptoms in patients receiving periodic injections of heparin, attribute the beneficial response to the profound effect of heparin on lipoprotein metabolism. Our own studies[14] with heparin have failed to demonstrate either subjective improvement in anginal symptoms or favorable influence on the electrocardiographic response to standard exercise.

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* Delivered at the Twenty third Annual Scientific Assembly of the Medical Society of the District of Columbia, September 30 1952.

The recent report of Gilchrist[15] offers a possible explanation for the unexpectedly large benefits recorded from the use of anticoagulant drugs. This author, in an apparently well-controlled series, has shown results which make the claims of Wright and associates appear extremely conservative. The mortality rate in Gilchrist's series was reported as cut in half from 43 to 21 per cent as a result of anticoagulant therapy. A striking reduction in thrombo-embolic deaths was, to be sure, clearly in evidence. But even more noteworthy was the finding that the early and efficient use of heparin and dicumarol or Tromexan appeared to influence favorably the outcome of the shock syndrome. Thus, only one fifth of the severely shocked patients in the treated group died as compared with approximately one half of those in the control group. Deaths from shock were stated to have been reduced from 15 to 4 per cent as a result of therapy. In explaining these results, Gilchrist suggests that the early employment of heparin in addition to the more slowly acting anticoagulants "may limit the spread of multiple thrombotic extensions in and through the zone of demarcation separating the necrotic from the adjoining healthy muscle." The hypotension of profound shock predisposes to further thromboses in the coronary distribution, in peripheral vessels, and subsequently in the pulmonary circuit. Such minor thrombotic episodes may be insufficient in themselves to yield localizing signs and yet may perpetuate the state of shock and lead to an extension of the original infarct. Control of the thrombotic tendency may thus prevent an advance in the vicious cycle of thrombosis, infarction and hypotension.

If these findings are confirmed, the current practice of administering dicumarol or Tromexan alone without the immediate use of heparin must be viewed as falling far short of attaining the optimum from anticoagulant therapy. Gilchrist's data seem to show that the over-all reduction in mortality rate was as much a result of the decrease in deaths from shock as it was a consequence of the decrease in frank thrombo-embolic deaths. The life-saving action of anticoagulant drugs in the presence of the shock syndrome, assuming such an action exists, may not have been observed in the studies of Wright for two apparent reasons. In the first place, only 15.6 per cent of the patients receiving anticoagulants in the latter series were given both heparin and dicumarol. Second, immediate admission to the hospital was relatively uncommon in that study, whereas nearly 60 per cent of the cases in Gilchrist's series were admitted within 48 hours of the onset of the attack. Obviously, the early administration of a rapidly acting anticoagulant would appear necessary if some of the harmful effects of the hypotension of profound shock are to be averted. It seems possible, however, that in Wright's study the unexplained large reduction in mortality attributed to the prevention of thrombo-embolism alone may have been in part a reflection of the favorable influence of these drugs in severely ill patients presenting the manifestations of shock.

In sharp contrast with these impressive results are the findings of several studies which indicate no significant difference in morbidity or mortality between patients who received dicumarol and those who did not. A few authors have suggested that the favorable statistics recorded in the literature may be due primarily to the effective suggestive therapy which accompanies the medical attention given to all patients receiving anticoagulant drugs. One observer has claimed that a tendency exists in such studies to neglect the control subjects who may often be unwittingly deprived of essential nursing care. In spite of the serious defects which have been thought to exist in the claims of proponents of this therapy, the uniformity of results from comparative studies of control and treated groups emanating from sources throughout the world indicate that these collective statistics cannot be disregarded. There seems to be little doubt that in severely ill patients the anticoagulants have an important place in treatment, but it is more difficult to justify their routine use in all cases of coronary thrombosis. The claim has been made that clinical experience is replete with examples in which disabling or fatal thrombo-embolism has occurred unexpectedly in the course of relatively mild attacks of acute myocardial infarction.[16] This view is in accord with statements found in almost all textbooks of cardiology which declare empirically that the outcome from acute coronary thrombosis is unpredictable because of the constant threat of sudden, unexpected death even for persons convalescing favorably. Although these assertions may be true, it must be admitted that opinions based on clinical impression alone are often at distinct variance with factual results derived from statistical analysis. Before it may be concluded that anticoagulants are indicated in all cases of acute myocardial infarction, it must be shown that the preventable mortality and morbidity, even with relatively mild attacks, significantly exceed the incidence of complications and death attributable to the drug itself. Although the literature contains numerous examples of major hemorrhagic complications and death arising from the use of anticoagulant drugs, the true incidence of such reactions encountered by the specialist on the one hand and the general practitioner on the other has not as yet been accurately estimated. In the light of present knowledge, therefore, one cannot exclude the possibility that the anticoagulant, like any other drug, may be indicated only under certain well-defined circumstances.

In an attempt to determine the frequency of thrombo-embolism as a cause of disability and death in relatively mild cases of acute myocardial infarction, the effect of conventional treatment without the use of anticoagulants was studied by us in 489 patients who sustained an uncomplicated first attack of this disease.[17] The case material for this study was derived from a review of 1,047 consecutive admissions for acute myocardial infarction to 3 New York hospitals. On the basis of information available on the day of admission to hospital and without regard to subsequent developments, each of the 1,047 patients was classified as "good risk" or "poor risk." The serious prognostic signs enumerated for the purpose of selection were a history of previous infarction, intractable pain, severe or persistent shock, cardiac enlargement, gallop rhythm, heart failure, arrythmias, and other states predisposing to thrombosis. In the "good risk" group, in which none of these factors was present, the mortality was only 3.1 per cent as compared with 60 per cent in the group showing

1 or more of these signs. Similarly, the frequency of thrombo-embolic complications for these prognostic groups was 0.8 per cent and 10.6 per cent respectively. In the "good risk" group, when allowance was made for deaths which obviously could not have been prevented by dicumarol, it became evident that the theoretically preventable mortality with this drug could not have exceeded 1.0 per cent. In fact, among "good risk" patients surviving 48 hours from the time of admission to hospital, the total death rate from all cardiovascular complications was only 1.2 per cent. This finding, therefore, does not reflect the formidable risk of sudden death claimed to exist by many authorities even in the course of mild attacks of this disease. The data, furthermore, do not confirm the view that thrombo-embolism is an obviously significant cause of disability and death among such milder cases.

From these figures one must conclude that even if dicumarol were an infallible drug, which obviously it is not, the maximum benefit theoretically obtainable from the complete prevention of thrombo-embolism in "good risk" cases would not justify the dangers inherent in any interference with blood clotting. The incidence of major hemorrhage from anticoagulant therapy, even in the hands of skilled investigators in large medical centers, has been reported in figures ranging as high as 10 per cent.[18] The frequency of death from hemorrhage induced by heparin or dicumarol will not be accurately known until more extensive statistical studies based on autopsy findings are at hand. Serious hemorrhage from the brain, gastrointestinal tract, pericardium and kidney may be recognized clinically and identified with ease at necropsy, but much more elusive is the recognition of hemorrhage into the wall of an atheromatous coronary artery as a result of such therapy. Biss[19] has shown that extensive intimal hemorrhages causing extension of the original infarct may result from dicumarol and related drugs. The frequency of this complication, however, has not been determined. Similarly, it is not yet known whether or not anticoagulants actually increase the risk of cardiac rupture. Nevertheless, in a recent survey conducted by us[20] through the medium of a questionnaire, 228 cardiologists and internists reported a total of 122 deaths caused by hemorrhagic complications. Of this group of specialists, 23.7 per cent had encountered 1 or more deaths from this cause. Nichol[18] reported the death rate from hemorrhage induced by dicumarol or heparin in his large collected series as 0.18 per cent. Numerous reports in the literature by capable investigators casually mention 1 or 2 deaths from this cause in analyses comprising 100 patients or less. The probable results of therapy administered under the guidance of less skilled hands should also receive consideration. It must not be overlooked that general practitioners and not scientific investigators treat the vast majority of patients with acute coronary artery thrombosis. From these considerations it appears that any improvement in crude mortality rate in unselected cases of acute myocardial infarction under anticoagulant therapy must result from benefits which accrue among seriously ill patients alone. From the data at hand we are unable to find an acceptable basis for the use of anticoagulant drugs in patients sustaining an "uncomplicated" first attack. Similar findings and conclusions have recently been reported by Papp and Smith,[21] Baer, Heine and Krasnoff,[22] Littmann,[23] and others.

Many authorities have asserted that old age provides a special indication for the use of anticoagulant drugs in acute myocardial infarction. The view is widely held that a patient over the age of 60 has a greater chance of dying than a younger patient who has sustained an attack of similar severity. No justification exists for this concept. Although statistically more older patients sustain a severe attack, the prognosis for a severe attack or a mild attack is unaltered by age.[24] Since the clinical picture alone determines the outcome in this disease, the age of the patient should not be considered an important factor indicating or contraindicating the use of anticoagulants.

The wide employment of anticoagulant drugs in acute coronary artery thrombosis has resulted in certain unfortunate practices. Patients are being rushed to the hospital in all parts of the world within a few hours of the onset of their clinical attack primarily for the administration of these agents. This is occurring despite the fact that the highest death rate in acute coronary artery thrombosis prevails during the first 48 hours following the onset of symptoms. In Yater's series[25, 26, 27] more than 75 per cent of the patients who died did so within the first 24 hours of their attack. Our data show that even in the mild cases approximately half of the total deaths occur unexpectedly during the first 48 hours. These early deaths are presumably the result of sudden ventricular fibrillation, cardiac asystole, or congestive heart failure. They are unrelated to thrombo-embolism and almost certainly cannot be prevented by the use of anticoagulant drugs. The first 48 hours following an attack should therefore be recognized as the most critical period in the patient's entire illness. The desire to save the 10 per cent who, it is claimed, may die from thrombo-embolism after the first week should not jeopardize the chances for survival of the 20 per cent or more who are known to die from other causes during the first 2 days. For many patients, being jostled in an ambulance and admitting office, subjected to the psychic trauma of a hospital room and bed, covered with an oxygen tent often when oxygen is entirely unnecessary, and repeatedly punctured for prothrombin and coagulation times, hardly qualify as a scientific regimen for recovery during this early critical period. In most instances any form of treatment deemed necessary can usually be initiated in the patient's own home, and removal to hospital can be accomplished, if advisable, when the first 48 critical hours have passed.

Summary

Strong evidence now exists that anticoagulant therapy represents a valuable contribution to the treatment of acute myocardial infarction. In severely ill patients such therapy should be administered early and intensively with the use of heparin for the first few days in an attempt to influence favorably the shock syndrome as well as to prevent thrombo-embolism. On the other hand, anticoagulants should be withheld in "good risk" patients, because the mortality rate from hemorrhage induced by these drugs appears to be in excess of the preventable mortality. In these mild cases, therefore, the employment of such measures as the low bed, bedside commode, early armchair treatment, and mild active and passive exercise to encourage circulation in the extremities provides adequate protection at home or in the hospital from the small risk of thrombo-embolism. In the individual case the severity of the clinical condition alone and not the age of the patient should determine the need for anticoagulant drugs. In all cases hospitalization should be delayed, if possible, for a period of 48 hours because of the dangers of removal during this early critical period, but anticoagulants should be instituted without delay if they are deemed necessary. The anticoagulant, like any other drug, should be administered only under certain well-defined circumstances.

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DIAGNOSTIC TECHNICS WITH RADIOIODINE*

SIDNEY C. WERNER, M.D., F.A.C.P.

Assistant Professor of Clinical Medicine, Columbia College of Physicians and Surgeons; Assistant Attending Physician, Presbyterian Hospital, New York City

THIS paper is designed to outline those methods employing radioiodine which are presently useful in making a diagnosis of thyroid disorders, together with some of the advantages and limitations of this approach. The biophysical aspects of these procedures have been presented elsewhere and will not be reviewed here.

The selective localization of iodine in the thyroid gland has been known since the work of Baumann[1] in 1896. The introduction of stable isotopes into medicine revealed that the body cannot distinguish between these atomic variants and their more common prototypes. Hertz[2] and Hamilton and Soley[3] investigated 2 of the many radioisotopes of stable iodine, I^{130} and I^{131}, and found that radioactive isotopes are not differentiated by the thyroid from stable iodine, I^{127}. They noted the presence of radioiodine within the normal gland after ingestion and found deviations from this in patients with thyroid dysfunction.

Since iodine as iodide is excreted by way of the kidney, efforts have been made to use radioiodine diagnostically by measuring total urinary excretion over a given time.[4] A high excretion suggests myxedema, since the gland is apparently not retaining much of the administered material. A low excretion is indicative of hyperthyroidism. However, physiologic and pathologic variations in renal function, and difficulties in collecting urine with errors known and unknown to the physician make this approach undesirable for routine clinical use. Nevertheless, unimpaired renal function is a necessity for any use of radioiodine diagnostically, since nephrosis and nephritis may alter the result considerably.[5, 6]

The establishment of a sound technic for the quantitative measurement of uptake of isotope measured directly over the gland[7, 8] furthered the development of the diagnostic use of radioiodine. There now exist many technics, most designed to distinguish between the hypothyroid, euthyroid and hyperthyroid states, and several to appraise function in nodular areas of the gland or to detect functional metastases from carcinoma of the thyroid. All these methods depend upon the cycle of utilization of iodine (figure 1) and in general test one or another phase of the cycle. After intravenous administration, or ingestion and absorption of iodine, the material becomes distributed to all tissues by immediate diffusion. Complete equilibrium is achieved in 10 to 15 minutes after intravenous injection or at about 2 hours orally in the fasting state. During this time, uptake by the thyroid and excretion by the kidney have begun. After iodide has attained equilibrium with the tissues, rates of uptake by the thyroid and excretion by the kidney become measurable and are proportional to the plasma concentration. Iodide returns gradually from the tissues to the blood as removal from plasma progresses, and by 24 hours the tissues, except for about 10 to 15 per cent, are freed of the isotope. The normal thyroid at this time has reached a plateau of accumulation and little is being excreted in the urine. The iodide in the gland becomes rapidly utilized and converted to organic form. Synthesized hormone is then stored as thyroglobulin or released into the blood stream as smaller fragments of thyroglobulin to circulate in combination with the crude albumin fraction. Significant radioactivity does not appear in the organic fraction of the blood before 72 hours in euthyroidism, but considerable amounts may be detected in hyperthyroidism as early as 24 hours.

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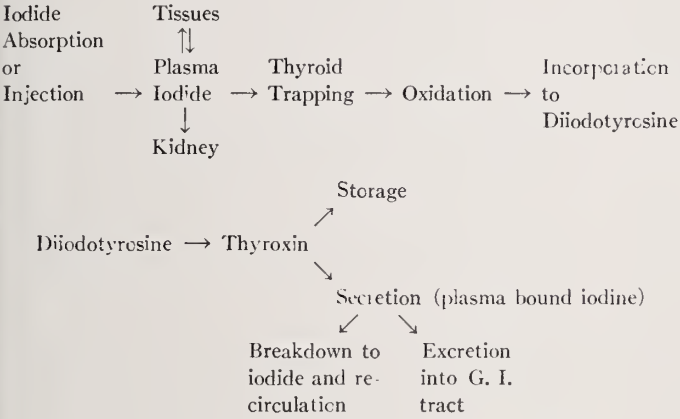
Iodide Absorption or Injection
Tissues
Plasma Iodide
Kidney
Thyroid Trapping
Oxidation
Incorporation to Diiodotyrosine
Storage
Diiodotyrosine
Thyroxin
Secretion (plasma bound iodine)
Breakdown to iodide and recirculation
Excretion into G. I. tract

FIG. 1. Broad outline of cycle of iodine utilization

Pituitary thyrotropin appears to be essential for the maintenance of trapping of inorganic iodine and for subsequent storage and release of completed hormone.[9] Although these functions are not abolished in the absence of the pituitary, they proceed at a rate only about one tenth of normal. Conversely, injected thyrotropin will increase uptake and promote a sharp release of hormone. Under normal circumstances the functions of uptake of iodide and secretion of hormone reflect each other closely. This correlation can be disrupted and is not obligatory.

TESTS DEPENDING ON UPTAKE OF RADIOIODINE

Thyroid clearance. The rate per minute at which the gland removes iodine from the blood has been termed "thyroid clearance"[10, 11] and is similar to, and proportional to, renal clearance of the isotope. This clearance is expressed as

$$\frac{\text{uptake rate } I^{131} \text{ by thyroid } (\% \text{ of dose per hr.})}{\text{plasma concentration } I^{131} \ (\% \text{ of dose per hr.})}$$

and averages 1.5 liters of plasma cleared per hour in normals. There is overlap between values obtained in normal and abnormal thyroid states, although the correlation is probably better than 90 per cent. No distinction is made between hyperthyroidism and hyperplasia. The method is more suitable for research needs, since it requires many measurements of thyroid and blood radioactivity. It is influenced by variations in renal function, by rates of absorption from the gut, and by diffusion rates from plasma into the tissues. The particular physical set-up of the laboratory in which the test is done should be such that results are readily comparable with those obtained elsewhere.

Rates of uptake. Once equilibrium of ingested iodide with the tissues has taken place, the ratio between uptake by the gland and by the tissues, the "thyroid-thigh" ratio, may give an index of the level of thyroid activity.[12] This is expressed as $\frac{\text{counting rate over thyroid}}{\text{counting rate over thigh}}$ after subtracting the background count from each. Measurements are usually made 2 hours after oral administration of the isotope, usually the time of maximum counting rate in thigh, or about 1 hour after intravenous administration.

Another use of the rate of uptake depends upon determination of the increase in actual quantity of isotope within the gland. Since the tissues of the neck as well as the rest of the body have a high concentration of radioiodine, the thigh must be measured and this value deducted from the neck reading to establish the exact quantity of isotope in the gland. Stanley and Astwood[13] plotted this uptake at 2, 4 and 6 hours after isotope administration against the square root of time. This results in a straight line whose slope can be determined, the "accumulation gradient." Flattening of this slope following the administration of antithyroid drugs gives an index of efficacy of these agents, and was used by Stanley and Astwood for such studies. They did not find the "gradient" of high reliability in hypothyroidism or hyperthyroidism, although Greer[14] found good correlation with the 24-hour uptake in euthyroid subjects.

The rapid methods above have the advantage that they provide an answer the same day the patient is seen, but their performance may require 1 to 4 hours of the patient's time and up to 40 minutes or more of the technician's time per test, since the neck and thigh concentrations of isotope are low and each may require measurement for as long as 30 minutes. Dosage of isotope may vary but need not be unduly high, 10 to 40 μc being adequate.

Twenty-four hour uptake. The uptake of iodine by the normal thyroid describes a parabola when plotted against time and reaches a plateau at about 24 hours. This total accumulation provides an index of thyroid function.[15] At this time the tissues contain amounts of isotope too small to detect with the Geiger or bismuth end window counters. Only the neck need be measured. Dosage of isotope can be kept low, and as little as 1 to 5 μc with a scintillation counter, 8 to 10 μc with a bismuth end window tube, and 40 μc with a Geiger counter can be used. The method has been found to be the simplest for the testing of a large number of patients, since the isotope is administered one day in 5 minutes and measured the next in 10 minutes, thus permitting patients starting the test or completing the test to be handled concurrently by the same technician. An 85 per cent correlation with the final diagnosis has been found in routine use of this method at the Presbyterian Hospital, only slightly less accurate than the results with a much more detailed and laborious technic, measuring gland, urine and blood.[16]

Tests Depending on Radioactivity in the Blood

These procedures depend in whole or in part upon measurement of the quantity of radioactivity which appears in the blood in organic form at 24 to 72 hours after the ingestion of the isotope. The simplest test merely establishes whether radioactivity has appeared in the organic fraction of the plasma at 24 hours. Almost none is found normally at this time.[17] A second procedure determines both labeled and nonlabeled organic serum hormone, the latter chemically determined at 3 days after administration of the isotope. This has provided an index of thyroid activity.[18] Sheline and Clark[19] have used still another plasma determination, the "conversion ratio," which is expressed as $\frac{\text{organic bound } I^{131}}{\text{total plasma } I^{131}}$ at 24 hours. The maximum concentratioe of organically bound I^{131} in the plasma reflects the fraction of the dose of I^{131} taken up by the thyroid, the turnover time of thyroxin by the body, and the quantity of thyroxin stored in the gland.

A better than 90 per cent correlation with the ultimate diagnosis is claimed for these methods. Unfortunately, high doses of at least 100 μc or more must be used for each test, and the determinations which require special care and apparatus are time-consuming, taking upwards of ½ to 1 hour to measure the radioactivity in each blood fraction after separation into bound and unbound fractions.

Tests for Localization of Radioactivity

Localizing technics make possible the distinction between active and inactive nodules in nontoxic and toxic nodular goiter. So-called "hot nodules" sponge up the isotope, while the rest of the gland is relatively inactive; whereas "cold nodules" may be completely inactive and the normal parenchyma be functional.[20]

A small, well-shielded aperture leading to the radiation counting head is placed against the neck and permits this type of localization. High doses of isotope must be administered, up to 240 uc, since only a fraction of the administered dose is being counted at any one time. Tissue from glands containing isotope can be placed against photographic film. Radiation effect activates the film so that "hot" and "cold" areas can thus be identified. This technic of radioautography has been improved to permit concurrent staining of the section by the usual histologic technics so that the histologic appearance and functional activity of the cells can be studied together.

Localizing counting can be utilized also for detection of metastatic lesions from adenocarcinoma of the thyroid or mixed papillary and adenocarcinomatous thyroid tumors able to accumulate iodine. A neck or body survey can be conducted and the possibility of using the isotope therapeutically kept in mind if significant uptake occurs. Occasionally the unknown primary site of a metastatic lesion becomes identifiable by this means.

A small collimated counting aperture leading to a scintillation crystal has recently been utilized to determine thyroid size by radiogeometry.[21] This procedure needs further study but may eliminate much of the guesswork that comes with simple physical examination of the gland for this purpose.

SOURCES OF ERROR WITH RADIOIODINE TECHNICS

Causes of decreased uptake. Radioiodine follows the same metabolic pathway as stable iodine. If the patient is ingesting or has recently received large amounts of iodine before the test, both the isotope and further stable iodine are almost entirely rejected.[8] This applies whether inorganic iodine, such as sodium iodide or Lugol's solution, or organic iodine, as in gallbladder and pyelography contrast media, and lipiodol have been given previously. The low uptake may conceal hyperthyroidism or give a false impression of hypothyroidism, if an adequate history is not obtained. This inhibitory effect may last up to 12 weeks after cessation of a protracted course of inorganic iodide and may influence the test for months after the use of organic iodine. The chemically determined value for serum-precipitable iodine may be elevated up to 3 years after the use of these latter medications, although butyl alcohol extraction may remove iodide as nonhormonal contaminant.[22] Iodized salt is rarely ingested in amount sufficient to inactivate uptake. Tincture of iodine applied over a wide area of skin may be absorbed in sufficient quantity to influence the test transiently.

Thyroid medication, taken therapeutically or secretly as in thyrotoxicosis factitia, will also abolish uptake of radioiodine.[8] The ingested hormone suppresses the release of thyrotropin by the anterior pituitary with consequent inactivation of the thyroid. This suppression usually wears off by 6 weeks after stopping the drug. However, rarely suppression up to 12 weeks may be seen or normal functioning be restored by 4 weeks. Thus, when hypothyroidism is suspected and the patient is receiving thyroid, 4 to 6 weeks off the drug is necessary before radioiodine can be given. Thyrotropin injected during ingestion of thyroid will circumvent this delay and stimulate the depressed normal gland without affecting the gland in hypothyroidism from atrophy or chronic thyroiditis. The gland in pituitary myxedema, on the contrary, shows a ready response to thyrotropin with increased 24-hour uptake of I^{131} and rise in serum precipitable iodine.[15] The physiologic explanations are evident.

Antithyroid drugs are the third group of agents inhibiting 24-hour accumulation of the isotope. Uptake does occur in the first few hours after administration, but, since no organic binding of iodine is possible, the isotope is then released. The completeness of this inhibitory effect and its duration after discontinuance of the drug depend on the particular agent employed, the duration of administration, and the underlying functional status of the gland. Thus, no reliable prediction is possible, and the former level of uptake may not be resumed for some weeks. This is especially significant in considering radioiodine therapy, when stopping antithyroid drug for 2 to 4 days for the purpose of administering radioiodine may lead to inadequate uptake of the therapeutic dose. A preliminary test dose is advisable before therapeutic doses are given in this circumstance. Finally, it should be noted that acute thyroiditis without hypothyroidism may abolish uptake of radioiodine for several months.[8]

Causes of increased uptake. An increased 24-hour uptake of radioiodine generally is evidence of hyperthyroidism. The normal range of uptake in this laboratory has been set at 10 to 40 per cent. About 7 to 10 per cent of normal people have uptakes between 40 and 50 per cent, and about 5 per cent of hyperthyroid patients less than 40 per cent. Results above 50 to 55 per cent are almost always the result of thyrotoxicosis or very active hyperplasia in the gland without hypersecretion. However, iodine lack, whether dietary or from loss of colloid due to recently given antithyroid drug, may permit unusually high uptakes. Falsely high values have been described in nodular goiter with hypothyroidism.[23] Here the isotope enters the gland but is not utilized. This can be proven by administration of potassium thiocyanate or perchlorate, which will wash out the unbound iodine but not the bound form.

Nephrosis and nephritis, as mentioned earlier, may increase the 24-hour uptake of isotope. Heart failure and febrile states seldom disturb the test.

Finally, high uptakes occasionally may be found in euthyroid or hypothyroid states induced by any form of therapy for toxic goiter. This is presumably due to persistent hyperplasia of the gland remnant.

Contraindications to Radioiodine

Radioiodine passes through the placenta and is also secreted into the milk. The fetal thyroid becomes active in the thirteenth week of pregnancy and thereafter.[24] Both the fetal and newborn glands will thus take up any radioiodine presented and may suffer injury from the radiation effect. In mice such damage to the fetal thyroid has led to nodular goiter, adenoma formation, and appearance of Hürthle cells within the gland.[25] However, very large doses of radioiodine were administered to the mother in this experiment. Nonetheless, pregnancy at any stage and the lactation period are considered contraindications to the diagnostic and therapeutic uses of radioiodine. It is also thought unwise to administer more than 100 μc I^{131} to a patient within the year. The radiation effect from such dosage may be significant, and little is known about cell recovery from such radiation. By contrast, fear of germ plasm, gonad or other organ injury, even with therapeutic dosage, is unfounded.

Summary

The various diagnostic tests which employ radioiodine have been reviewed. The physiologic basis for these procedures and their advantages and limitations have been defined. The contraindications to usage have been listed. It is concluded that radioiodine technics offer between 85 and 90 per cent or more accuracy in diagnosis.

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VAGINITIS

ROLAND BIEREN, M.D., F.A.C.S.

Gynecologist, Group Health Association, Washington

FEW conditions can present a more trying situation to the physician than a stubborn case of vaginitis. This report presents the cumulative experience of treating 500 nonpregnant women for a vaginal irritation on one or more occasions. In each a definite diagnosis was made as shown in the table. Despite differences in etiology, most cases of vaginitis have enough common factors to make discussion of their management as a group of problems profitable.

TABLE 1

Types of Vaginitis in 500 Cases

Type of Vaginitis	Number of Cases
Trichomonas vaginalis	220
Monilia albicans	133
Senile	113
Postantibiotic	19
Preadolescent	12
Diabetic	3
Total	500

In making a diagnosis the examination of a drop of vaginal secretion under the microscope will be found helpful. A drop of saline is placed on a slide, the unlubricated finger is passed into the vagina, withdrawn and touched to it. A cover slip is added, and it is examined under low power. Skill will develop with increasing practice. Often the diagnosis can be made in this fashion when the laboratory fails to do so with hanging drop and stained smear. It is thus possible to identify both Trichomonas vaginalis and Monilia albicans. Senile vaginitis can be confirmed by the presence of immature epithelial cells in appreciable numbers. If the woman has used a douche or some local treatment beforehand no organisms may be found. If so, she is instructed not to use any treatment and to return for reëxamination in 2 days.

The presence of Trichomonas vaginalis in the vaginal secretion or in the urine does not mean that clinical vaginitis is present. The organism is reported regularly by the laboratory in urine specimens from women who have no symptoms or objective findings. Examination of the vaginal secretions usually discloses trichomonads even though there are no symptoms. On rare occasions one sees an individual with an appreciable vaginal discharge containing large numbers of the organisms who refuses any treatment for the reason that the discharge is less annoying to her than it would be to take treatment. This, however, is exceptional. Some fastidious women drive themselves and their physicians crazy over a slight, nonirritating discharge merely because it stains their panties and has a musty odor. Five of the patients reported in this study had both Trichomonas vaginalis and Monilia albicans reported and confirmed by the laboratory on repeated tests. All were considered to have Monilia vaginitis and were treated accordingly. Trichomonads just happened to be an incidental finding. Conversely, I have never found Monilia albicans in the vaginal secretion without symptomatic vaginal moniliasis being present.

The usual patient in this study with Trichomonas vaginalis vaginitis is a fair-skinned blonde, who, once having manifested the condition, can be expected to have a recurrence at some later date. Review of the medical records, some of which go back 17 years of uninterrupted medical history, gives the overwhelming impression that vaginitis of all types is a distinctly chronic condition. The average woman with Monilia albicans vaginitis is a dark brunette. Exceptions occur, of course. I recall distinctly a fair-skinned blonde with the history of having been treated for Trichomonas vaginitis without success by several other physicians. Two successive examinations failed to reveal evidence of any type of vaginitis. Finally she confessed she had been using douches every day. She was persuaded to stop the douches for a week and to return. The subsequent examination showed a 1-plus vaginal discharge, not remarkable grossly. Under the microscope, however, large numbers of Monilia albicans were present. In cases of Monilia vaginitis the itching is often intense, and the thick, white, cheesy discharge is often enough to make a clinical diagnosis.

It is a remarkable fact that a history of some sort of allergy can often be elicited in women having Monilia or Trichomonas vaginitis. Take a woman with a vaginal membrane which is predisposed to be sensitive, expose it to a sensitizing organism (Trichomonas or Monilia), let something occur which "pulls the trigger," and you have a case of clinical vaginitis. What are possible "trigger" mechanisms? Pregnancy is probably the foremost one. Many records date the woman's first attack during the woman's first pregnancy. Anxiety and tension are undoubtedly others, as in a college girl studying for examination, or a young woman with the guilty conscience following illicit sex relations. Family distress is another. I see many women with recurrent vaginitis after their husbands have had heart attacks, or after being up several nights with a sick child. Often careful search reveals no "trigger." The vaginal fluid is a highly complex chemical and bacteriologic mixture, and there are undoubtedly a host of unknown conditions which provoke changes in it leading to recurrence of vaginitis. During the hot, humid summer weather of Washington recurrent Monilia albicans vaginitis occurs almost in epidemic proportions.

Because post-menopausal women have senile changes present in the vaginal epithelium there is no need to subject them to treatment. Such women are often referred because of an inflamed appearance of the cervix or vagina. In them the normal, thin atrophic mucosa looks red and irritated to the inexperienced eye. Post-menopausal women who develop vaginitis requiring treatment invariably complain of 1 or more of 3 symptoms. These are an irritating discharge, dyspareunia, and vaginal bleeding. When none of these is present it is not likely that therapy is required. It is also worth remembering that a woman who is taking oral or intramuscular estrogenic hormones is not likely to have senile vaginitis. When such a woman complains of vaginal irritation, it is likely that either Trichomonas or Monilia organisms have become active in the hormone-stimulated vagina.

After the practice of administering antibiotic drugs in tremendous doses began, particularly to hospitalized patients with serious infections, occasional cases of nonspecific vaginitis which presumably followed such therapy were seen. This type might be labeled post-antibiotic vaginitis. When present, neither Trichomonas vaginalis nor Monilia albicans can be found in the vaginal secretions. Until the advent of aureomycin large doses of penicillin and streptomycin appeared to be the inciting factor. Since the appearance of aureomycin several cases of moniliasis, presumably accompanying the use of the latter drug, have been seen. In this study these are included with the other cases of Monilia vaginitis. When severe, these also present oral, external auditory, and intestinal manifestations. A patient exhibiting one of the worst instances of vaginal moniliasis in my experience was religiously using aureomycin vaginal suppositories for an infection presumably evoked by oral use of the same drug for another condition.

Preadolescent vaginitis is usually gonococcal in origin, although occasional cases are seen in which this cannot be proven by either smear or culture. It does not matter, provided it is first made certain that there is no foreign body in the vagina. Most patients respond readily to the use of antibiotic drugs in dosage according to the age of the child. The 12 patients reported in this study are those who did not get this treatment and who were referred by the pediatric department for estrogen treatment. It is important to assure the parents, who are usually horrified, that the condition is nonvenereal and not serious.

Two of the 3 cases of diabetic vaginitis were diagnosed promptly on the first visit by means of a urinalysis. The third one was treated locally for several weeks before a urinalysis was performed and sugar and acetone found.

In addition to those for whom a diagnosis has been established, there are an equal number of women seen regularly complaining of vaginal discharge in whom no evidence of primary vaginitis can be found. In some, the source of the discharge may be cervicitis and cervical ectropion which may need attention. Others will appear to have excessive secretion from both the cervical and Bartholin's glands for no discoverable reason. The best that these patients can do is to douche daily and otherwise learn to live with the discharge. As I have already noted, some highly fastidious women will drive themselves and their physicians crazy about a little natural secretion merely because it stains their panties. Last to mention here is a condition which might by styled "pseudovaginitis." It occurs in psychoneurotic individuals and is usually associated with unrecognized sexual tension or feelings of sexual guilt. In married women it is often accompanied by dyspareunia. Such women are best treated only in a temporizing fashion until they can be persuaded to see a psychiatrist. They may present sufficient objective findings to fool even experienced physicians for awhile. If it is remembered that when there is no response to treatment after a reasonable interval there has been a mistake in diagnosis, a complication of therapy, or malingering, these can be identified. I recall especially a 41-year-old divorcee who had been under intensive daily treatment for vaginitis by 3 other physicians over a period of 4 months. Her story was that 2 months after her divorce she had had 1 illicit sexual exposure to relieve her sexual tension. Subsequently she developed an intense burning sensation in the vagina which was diagnosed as vaginitis. When simple local measures failed to give relief treatment was intensified. When I first saw her she was being painted and insufflated twice daily as well as using self-administered treatment at home. Careful questioning brought out the story of her sex life, in the course of which it was apparent she had developed a marked syphilophobia. At first she was resistant to suggestions of psychiatric help. After repeated reassurance that she did not have the disease, supported by negative blood tests, she finally consented. As is usually the case, I did not see her again except once, when she stopped by to thank me for being insistent.

Vaginitis is often given as a cause of dyspareunia. Sometimes it is the other way around; the woman with an aversion for sex can often put on a show good enough to convince herself and the physician too. I recently saw a patient who had married for the first time at the age of 49. Two years ago she consulted me for a mild menopausal anxiety state. She married chiefly because she was tired of supporting herself, she had not had a vacation for 4 years, and she wanted rest and financial security. Her husband had a well-established business with a good income. After 8 months of marriage she presented herself complaining of dyspareunia and an irritating vaginal discharge. She had not menstruated for 5 years. Examination showed a definite senile vaginitis, and a vaginal suppository of 0.5 mg. diethylstilbestrol was prescribed nightly. Three weeks later she reported she was no better. Examination showed complete disappearance of the senile changes with a healthy, normal-appearing mucosa. The vaginal secretion revealed no infection. Thinking that I might have activated a Trichomonas infection despite the negative microscopic examination, I prescribed an acidifying vaginal suppository for daily use. A week later she reported that this had made her worse. Examination now showed slight recurrence of senile changes, and a synthetic estrogenic cream was prescribed. Two weeks later she reported she was worse than ever. The vagina at this time was clean and normal in appearance. The vaginal secretion showed mature, adult epithelial cells, no immature cells, no pus cells or red blood cells, and no Trichomonas or Monilia organisms. I now reviewed her domestic history and discovered that shortly after her marriage her husband had had a serious illness lasting many weeks which depleted both their savings because he had no hospitalization insurance. Because of his illness his business suffered reverses and he was now on the verge of bankruptcy. Need more be said? Nothing short of an unexpected inheritance could help this woman. Her dyspareunia was the direct consequence of her domestic situation.

In treating vaginitis there are 4 important rules to be remembered:

1. Use as simple treatment as will usually give satisfactory results, and avoid irritating chemicals. Overtreatment will cause more grief than undertreatment.

2. The less often a woman has to be treated in the office the more she will appreciate it. Women do not like to be exposed and examined unless it is really necessary. Do not delegate office treatment to your attendant as a routine procedure.

3. Be sure to explain the chronic nature of the condition and the likelihood of its future recurrence. Many women are afraid they have a serious infection, a venereal disease, or cancer, and they need reassurance. When many of my old patients come in for their routine gynecologic examination, they will say, "Oh, I had a recurrence of that itching, and I used the suppositories you prescribed some time ago and it cleared it up, so I didn't bother to call you."

4. Finally, I must emphasize again, when 2 or 3 weeks of treatment which ordinarily proves effective fails to give relief, either the wrong diagnosis has been made, a complication of treatment has occurred, or the patient has failed to use the treatment. This last statement may seem far-fetched, but I can recall 2 vexing cases in which both the women and their husbands gave me a bad time until I suspected something amiss. In both cases I was able to trap the woman in a deliberate lie and expose the fact that she was using a mild case of Trichomonas vaginitis as an excuse to avoid sexual relations and that actually relief was the last thing wanted.

Many reports have extolled the virtue of various drugs for the cure of Trichomonas vaginalis vaginitis. Most chemicals are effective, although some may adversely affect the host. I seldom use heavy metals. Argyria has been reported, and I have seen 1 patient develop exfoliative dermatitis from arsenical powder insufflated into the vagina. I have used scores of drugs at one time or another, with varying degrees of success. I recall 2 in particular that I was highly enthusiastic about at one time, compressed tablets of lactobacilli and an oily preparation which liberated nascent oxygen. During a particularly hot, humid summer spell the lactobacilli tablets caused the most terrific bullous edema of the vulva I have seen. On the urgent recommendation of the dermatologist I discontinued their use. The second product worked fine except that the oil leaked out all over the patient's clothes and the women further complained because the capsules for home use were almost as large as golf balls. Over successive years I have narrowed treatments down to simple, nonirritant measures as much as possible. There are always exceptions. I have a few patients who will not obtain relief from any but arsenical products, despite my dislike for them.

The routine when a woman presents herself with a vaginal irritation is as follows. When she calls for an appointment she is instructed not to douche or to use any local treatment for 24 to 48 hours before the appointment and to bring in the first voided morning urine. When interviewed she is asked how long the attack has lasted, what, if anything, seemed to bring it on, whether she has had prior attacks, and, if so, what diagnosis was made.

On examination the condition of the vulva, vagina and cervix is noted. A bimanual pelvic examination is done. The nature and amount of discharge are observed. A drop of vaginal secretion (taken with the unlubricated finger at the beginning of the examination) in a drop of saline is examined under the low power before the woman is permitted to dress. If the condition appears to be acute Trichomonas vaginalis vaginitis the vagina is insufflated through the open speculum by means of the handy, plastic, 1-dose Tetronyl Insuffiette made by the Smith, Kline and French Laboratories. The insufflation is continued as the speculum is withdrawn. If the diagnosis appears to be acute Monilia albicans vaginitis, the vagina is painted through the speculum with 1 per cent aqueous gentian violet solution. If the condition does not appear to be acute, office treatment is seldom necessary. It is important to remember never to insufflate the vagina except through an open speculum in order to prevent the possibility of air (and powder) embolism which might follow pressure distention of the generative tract with fatal consequences.

When the woman is dressed, the nature of the condition is explained to her and she is instructed in treatment at home. For Trichomonas vaginitis I prefer either a Floraquin vaginal suppository, made by G. D. Searle & Company, or Allantomide Vaginal Cream with Aminoacridine, made by the National Drug Company. Prior to the use of vaginal medication a douche may be employed using either vinegar, or any bland douche powder, a tablespoonful to a quart of lukewarm water. Often the use of medication on retiring and a douche when arising in the morning may be recommended.

For Monilia albicans vaginitis, good results are obtainable with Propion Gel, made by Wyeth, Inc. Furthermore, when a woman phones and is unable to come to the office, the combination of Propion Gel and a bland douche may be prescribed via the telephone, since this will also give relief in Trichomonas vaginalis vaginitis. When it is used, the woman must be cautioned that the jelly may produce a burning sensation at first, but that after a few times this will wear off.

The frequency and duration of treatment vary in cases of Trichomonas and Monilia vaginitis. At the worst, office treatments may be required 2 or 3 times a week for 1 or 2 weeks. Home treatment may be necessary twice daily for the first week, then once daily for an additional week or two. Treatment may be continued while the woman is menstruating. After relief is obtained it is wise to have the woman use home treatment again for a week after her subsequent period. Women with a known tendency to have recurrent vaginitis are instructed to douche regularly after each period if Trichomonads are the cause, and to use the jelly if Monilia organisms are found.

Ordinarily, in treating senile vaginitis the daily use of a diethylstilbestrol vaginal suppository, 0.5 mg. strength, or an applicatorful of Dienestrol Creme, made by the Ortho Pharmaceutical Corporation, will provide relief in a week. Sometimes one will work when the other does not. It is wise to have the patient return in a week for reëxamination, because if a complication of treatment is going to appear it will be evident by then. In such instances, the woman will report that she has experienced no relief, and that, if anything, the condition seems worse. Examination will reveal either Trichomonas vaginalis or Monilia albicans vaginitis superimposed on the now thick, healthy vaginal mucosa. The next step is to treat the infection topically and to use small doses of estrogen orally (0.25 mg. diethylstilbestrol, 0.625 mg. conjugated estrogen) to maintain the vaginal mucosa. Senile vaginitis, particularly when associated with dyspareunia, has a distinct tendency to recur.[1] When a patient with known Trichomonas or Monilia activation has a recurrence, it is wise to use a combination of treatment at the outset.

The average patient with senile vaginitis needs no office treatment; if, however, on first examination the condition appears unusually severe, treatment may be initiated with a single intramuscular dose of 1.0 mg. estrogen in oil. In rare cases there is complete denudation of the vaginal mucosa with subsequent bacterial infection producing a foul vaginal discharge. When the condition is this bad, the application of Allantomide Cream will help clear up the infection and discharge quickly.

Postantibiotic vaginitis is self-limited. Daily treatment similar to that given for Trichomonas vaginalis vaginitis will give the woman something to do and speed recovery. Apparently the lactobacilli, among other flora, are victims of the antibiotic drug, and once they establish themselves the condition remedies itself. Monilia albicans vaginitis following the use of aureomycin must, of course, be treated as a primary infection.

When a child with preadolescent vaginitis has failed to respond completely to more than 1 antibiotic drug, a single intramuscular injection of 0.2 mg. estrogen in oil will usually clear up the vaginal infection in a few days. The estrogen stimulates the formation of a thick, adult type of vaginal mucosa which readily throws off the infecting organism.[2]

Vaginitis in a diabetic will usually resolve spontaneously once the diabetes is under control.

Next to improper diagnosis the commonest mistake in managing vaginitis is failure to anticipate and recognize complications when they occur. Most complications result from treatment. Overtreatment of either Trichomonas vaginalis and Monilia albicans vaginitis with irritating chemicals sometimes produces a secondary, ulcerative condition that subsequently becomes bacterially infected with a foul discharge and severe discomfort. One patient in particular, a 48-year-old woman who had sustained an artificial menopause at the age of 41, for several years had received large doses of estrogenic hormones and developed a vaginal irritation which was incorrectly diagnosed as senile vaginitis. Her physician intensified the dose of hormones, but she did not obtain relief. Another physician correctly made the diagnosis of Trichomonas vaginalis vaginitis and began a daily program of painting and insufflation in the office plus self-treatment at home. I first saw her after 5 weeks of this treatment with painfully swollen vulvar and perivaginal tissues; there was complete gross absence of epithelium lining the vagina, and necrotic ulcers were pouring a profuse, dirty-gray, foul-smelling discharge onto her clothes. She was given 400,000 units of penicillin intramuscularly to control the extensive bacterial infection. Bland douches and lotions were substituted for the previous treatment, and her estrogenic hormones were continued to help reestablish a vaginal lining. Within 10 days the vagina had healed and become reëpithelialized. However, she had by now manifested recurrence of the Trichomonas vaginalis infection. Daily use of a Floraquin vaginal suppository provided relief from this.

Another complication of treatment appears to be allergic and is predominantly vulvar, with bullous edema and intense discomfort. As previously noted, one of my worst experiences with this was in hot, humid weather and followed the use of compressed tablets of lactobacilli. Discontinuing the drug and substituting bland measures afforded relief. When vulvar lesions are present, the service of a dermatologist is invaluable. Undoubtedly there are gynecologists who are skillful about managing vulvar skin lesions and complications.

As already noted, estrogen alleviation of senile vaginitis frequently lights up a Monilia or Trichomonas infection. A less troublesome complication is the burning, smarting sensation produced in the vagina in some women with the first few applications of the drug. This wears off after a few days. Occasionally an individual complains of soreness and tingling of the breasts following the vaginal application of estrogen.

The preadolescent child often experiences swelling of the breasts after an injection of estrogen and rarely will menstruate slightly up to 3 weeks afterwards. These complaints are not serious, but the parents must be cautioned that they may occur and that there is no cause for alarm.

CONCLUSIONS

Although differing in etiology, most cases of vaginitis have certain factors in common which

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President's Page

COÖRDINATION OF HEALTH RESOURCES FOR THE INDIGENT

In the District of Columbia there is no dearth of agencies concerned with the health of our people, and especially of the indigent and medically indigent. The Health Department has 20 bureaus and units, and there are more than 40 voluntary agencies. In recent months a survey of medical problems concerned with the indigent has been conducted by a large group of interested and qualified people, and it has become clear that there is great lack of coördination of resources. This lack exists in 3 directions: (1) among the bureaus of the Health Department; (2) between the Health Department and the voluntary agencies; and (3) among the voluntary agencies.

It appears to me that coördination can be attained only through 2 channels: (1) by the establishment of a Board of Health to assure coördination within the Health Department, and (2) by assigning to the Health Section of the United Community Services the task of bringing about coördination of public and voluntary agencies.

A Board of Health should be autonomous like the Board of Education. It should make all policies and regulations for the Health Department. The Director of Health (Health Officer) should report to the Board and make recommendations to it. His hand would be greatly strengthened. He would exchange one boss for another, but a boss representing the community and with no personal ax to grind, a boss who would fight his battles for him. The Board would appoint inter-bureau committees and establish a statistical and research unit, among other things. The Board should consist of a group, let us say 9, composed of both professional and lay persons nominated by various organizations and appointed by the Commissioners. Its budget would naturally have to pass through the hands of the Commissioners.

The Health Section of the United Community Services is composed of a large number of public-spirited people representing all phases of social and health matters, in other words, the total community. Its full-time staff is small and should be enlarged. It is the proper group to coördinate activities in the health field. The continuity of its functioning would obviate the need for *ad hoc* committees that plague us from time to time with their surveys and whose recommendations rarely bear fruit.

A basic concept of community resources for care of indigent and medically indigent patients is that official and voluntary agencies should not be in competition but should work as a team. The public cannot afford to have its voluntary agencies scuttled, a trend that is now in evidence in the District in at least 2 directions, namely, inpatient care in the voluntary hospitals and nursing home care.

The sick indigent and medically indigent should not be looked upon as a separate class of people. Ideally, they should be treated in the same hospitals by the same physicians as other patients. A municipal hospital has no place other than to supplement the voluntary hospitals when these cannot meet the needs. This system would bring about integration of medical services to the indigent on a geographic basis, would support the voluntary hospitals financially, and, by providing material for the graduate professional training programs of the hospitals, would increase the quality of medical care throughout the land. By means of early diagnosis and prompt treatment of the patients as they pass through the outpatient department of their own hospital, substantial savings to the taxpayers might well result. Obviously the patients would benefit.

Wallace M. Yater

Editorials

WHAT SHOULD WE TEACH OUR MEDICAL STUDENTS?

Recently I had dinner with a prominent ophthalmologist (and head of his department in a midwestern medical school) and the administrator of one of our better Southern medical school hospitals. On this pleasant occasion a sharp difference of opinion arose concerning the philosophy of medical instruction.

The midwestern specialist, true to his chosen field, was insistent that the salvation of medicine was in more highly trained specialists. He felt that the trend toward specialization should begin in the undergraduate teaching of medicine and be carried vigorously forward during internships and residencies. The implication was that the more highly developed the technical skills of our physicans become, the better our population will be cared for.

The hospital administrator (a physician himself), on the other hand, felt that it was important for the medical student to consider the patient as a whole, whose needs cannot always be compartmented. He felt that not only did the embryo physician need to think of the patient as an individual, and that individual as an entire body and mind, but also that the patient had a great need of one medical man to whom he could turn whenever he thought he had a medical problem.

This decided difference in philosophy makes us wonder. Is the ultimate aim of medicine limited to finding a cause and a cure for all of the medical ills of man, or is there a broader and more satisfying goal? In spite of our increased technical skill, our tremendous advances in diagnosis, our research in etiology of a multitude of diseases, our discoveries and refinements in the field of therapy, there continue to be the problems of getting the patient to the right physician and making the physician available to a greater number of patients.

The general practitioner, who has served so admirably in the past as the families' medical confidante, who has taken care of most of their ills, and who has referred them to the specialist when the need has arisen, is becoming scarcer each year. The patient now, more than before, frequently has no one physician to whom he can turn for advice. More frequently the patient makes his own tentative diagnosis, and having done so, picks the specialist to whom he thinks he should go, often the wrong one. For his headache he parades successively to the otolaryngologist, the ophthalmologist, the neurologist, and the gastroenterologist. For his visceral discomfort he goes to the cardiologist, the urologist, the proctologist, and the gastroenterologist. More often than not he should have seen the psychiatrist.

But consider the patient's plight. To whom shall he turn when he can't make his own diagnosis? Would it not be better (for both the patient and the young physician) to teach the medical student the philosophy and practice of "general practice" (its satisfactions as well as its hardships)? Should not the intern and the resident be encouraged to obtain a broader knowledge, a deeper understanding of the patient as a whole and as an individual? Would not most specialists be better prepared for their specialty if they had a foundation of general practice to build on?

These thoughts are offered with the full knowledge of the length of time required for medical training now, and with due regard for the diffi-

Opinions expressed in contributions to the Editorial Section are those of the writers and do not necessarily reflect the views of The Medical Society of the District of Columbia

culties the general practitioner has in keeping abreast of the broad expanse of medical knowledge.

Maybe the future of medicine is not just in better diagnosis and treatment of disease, but in better understanding and management of the patient.

F. D. C.

DUPUYTREN'S CONTRACTURE

About the only definite etiologic factors known concerning Dupuytren's contracture are that it rarely appears before the age of 40 and that males are predominantly affected. Forty is about the time of the appearance of the so-called degenerative diseases, and of course, Dupuytren's contracture occurs in conjunction with many of them. This association has caused many to consider the constitutional disease which may be present a cause for the fibrositis involving the palmar fascia. Is it?

Many cases occur in persons who work with their hands and whose palms are exposed to trauma. Many more persons in this category do not have the disease than those who do. Gout, rheumatoid arthritis, diseases of the nervous system, arteriosclerosis, diabetes and syphilis are mentioned as factors in the production of the contraction of the palmar fascia, and of late virus infection, through the overlying skin, has been suggested, although no organism has been discovered. The best summation I have seen appears to be that Dupuytren's contracture is a fibrosis of the palmar fascia due to senility, tophoneurotic changes and metabolic derangements, and favored, in many instances, by trauma. An independent cause may some day be discovered.

The fascia contracts first and then the overlying skin. The tendons take no part in the morbid process. As soon as the tendon is released by excising the overlying fascia the finger may be normally extended. There is no necessity for cutting or otherwise treating the tendon. The fat in the plam of the hand often disappears, causing an adherence between the skin and the fascia.

The progress of the disease may be slow and extend over many years, or it may be surprisingly rapid. Injury causing overextension of the fingers may increase the progress notably, once the contracture has begun. In the early stages the patient is not inconvenienced by his inability to completely extend the fingers. The skin is completely movable over the fascia and is unchanged until the fingers begin to contract. Then it may become adherent, thickened and umbilicated over the transverse crease of the hand. No great pain is experienced, but a neuralgic ache may be present at times.

The ring finger is most frequently first affected. Flexion occurs in the metacarpophalangeal joint, then the middle joint. The distal joint is not affected. The finger is gradually flexed until the end of the finger rests on the palm. Extension is impossible without operation. The little finger and the middle finger are often later similarly affected, in the order named.

Attempts to manipulate the fingers and to stretch the palmar fascia are not only painful but futile, and the result is more rapid contraction of the fascia. Spontaneous cure is rare, and recovery is brought about by excision of the affected palmar fascia. Operation is not advised for diabetics or persons suffering from cardiorenal disease. Disability following operation usually exceeds 4 weeks. Skin grafting is sometimes necessary for healing, and after the second week physiotherapy is usually necessary for full recovery.

Textbooks on surgery devote little space to Dupuytren's contracture, which is a serious condition to those who must use their hands for their livelihood. The operation must be skillfully performed, and the after-treatment is important and prolonged. There are very few operations today which require so much time for complete recovery, and this short review may call attention to a condition which is not uncommon and which is quite important.

I am prompted to mention the disease at this time because I have recently recovered from the operation on my left hand, and I am grateful to a conservative, skillful surgeon who has restored its usefulness.

James A. Gannon, M.D.

MEDICAL PUBLIC RELATIONS

The best and most important medical public relations are those resulting from the direct contacts between physician and patient. Complete understanding between the two regarding the patient's illness and the economics involved fosters good will and minimizes the incidence of grievances. The following letter written to our Committee on Public Relations by a most understanding attorney emphasizes the necessity of informing the patient and his family of all the aspects of a case.

"Sirs:

"I am writing to report on an unfortunate situation involving a client of mine and a surgeon in the District of Columbia, with the thought that you may wish to call this incident to the attention of other physicians, in order to avoid a possible recurrence. My client and the surgeon involved have discussed this situation with me, and for reasons that will become obvious, they have agreed that none of their names should appear in this letter.

"My client, whom I shall call Miss A, was sent by her family physician to a surgeon and gynecological specialist, Dr. B, because her family physician suspected the presence of a tumor in her female organs. Dr. B made a preliminary examination and informed Miss A that he found indications of a tumor, but that a further examination would be necessary, under anesthesia. He also informed her that if, upon such further examination, he should find that the tumor ought to be removed, he would remove it.

"Miss A was then hospitalized, and after the further initial examination was performed under anesthesia, Dr. B decided that an operation would be necessary. He proceeded forthwith to open the abdominal cavity, and he found a number of tumors, so involved with the patient's womb that he had to and did remove the womb together with the growth. When Miss A recovered from the anesthesia and was informed by the doctor that her womb had been removed, she experienced a severe emotional shock, since neither she nor her family had considered the possible removal of any organ in the course of the operation. Dr. B, on the other hand, had assumed from his discussions of her condition with Miss A that she had realized fully the existence of that possibility.

"Dr. B does not now recollect whether he made specific reference to the possibility that an organ might have to be removed. Neither Miss A nor her family, on the other hand, had any idea that this was a possibility, and all of them were completely unprepared psychologically for the event. In the discussion that I had with all of the parties, it seemed to me that the occasion for the misunderstanding rose from the fact that a physician or surgeon naturally sees the removal of any abnormal growth as involving the possibility of removing the organ where the growth is found, while the lay patient, on the other hand, may never consider such a possibility, because the condition to be operated upon and the normal functioning of her system are sharply separated in her mind, or perhaps because she has some mental or emotional block on the subject.

"In any event, the incident, I believe, brought home to Dr. B the ever-present danger of a tragic misunderstanding under these circumstances, involving the possibility of real emotional injury to the patient, and the importance of making absolutely clear even the remote contingency of such an operation. Dr. B, Miss A, her family and I all feel that the incident should be called to the attention of the medical profession, in order to help prevent recurrences in the future.

"I should add that my client and her family were entirely satisfied with the results of the operation and have only the highest opinion of Dr. B's competence and professional skill, as I have in part indicated by omitting the names involved. There is no intention to place blame on any individual, but only to recall your attention to a problem which I am sure must concern physicians as much as patients.

"In view of all the circumstances, in disseminating this letter or its substance to other physicians, you may wish to omit my name as well."

BREAKDOWN OF SCIENTIFIC COMMUNICATION

Dr. Vannevar Bush's address to the Twenty-third Annual Scientific Assembly was the work of a thoughtful, articulate man. For those who missed its delivery, we are fortunate to be able to publish the text in this issue of the ANNALS.

Nothing—certainly not this editorial—can transmit Dr. Bush's messages more effectively or more plainly than his own language. But we claim the editor's privilege of writing for emphasis when we call attention especially to what he had to say about the danger of a breakdown in scientific communication.

We must acknowledge that specialization has been the only possible remedy for the growing complexity of medical knowledge. One of the evils of specialization, as Dr. Bush pointed out, is the tendency for specialists in each sphere to talk and write in terms (jargon?) that are more or less incomprehensible to specialists in other spheres, or even to the man who tries to retain a wide general interest.

We believe that there are two immediate remedies for this difficulty. One is to enforce some method for discipline. Actually it will have to be mainly self-discipline. Specialist speakers and writers will have to train themselves to use language that transcends the barriers of specialties. They will have to be constantly alert to the needs of the scientific audience outside their field of interest.

This remedy alone will help a lot. Too many specialists are using words and forms of expression that are unnecessarily complicated. They remind us of the man who tried to kill a fly with an elephant gun. After his shot was fired, he never was sure what happened to the fly, and he didn't much care because the noise had been impressive.

The second remedy is to get the specialists together for discussions under the guidance of a skillful moderator. A good example of how this works is to be found in any of the published "Conferences" of the Josiah Macy, Jr., Foundation. In these conferences experts from various fields manage to exchange ideas quite effectively.

To every physician who subscribes to three or four or a dozen medical journals and has access to several thousand more if he wants them—to every such physician, it is instantly apparent that communication of medical information is breaking down and knowledge is being scattered and "lost" because there is so much of it. We like Dr. Bush's idea that one remedy for this is a device like the human brain that has unparalleled capacities for sorting, storing, and recalling information by mysterious processes of thought associations. Dr. Bush implied that this device has not yet been developed, but we wonder. We think we've met one or two in human form, and we believe they deserve the same kind of nurturing and encouragement that Dr. Bush would give to research workers.

H. H. H.

In and Out of Focus

BY THE OBSERVER

The Annals' New Year

Anyone who has in any way been responsible for a publication, modest or otherwise, has experienced deep satisfaction when for the first time he holds the finished product in his hands. Minor errors which have crept in despite his vigilance may to some degree dampen his spirits, but the paternal pride for the offspring of his creative ability more than compensates for this.

The editorial staff of the Medical Annals, being typical, reacts in a similar manner. They, too, examine each issue as it comes off the press with what your Observer believes is pardonable pride. It would be sad if this were not so, because of the many hours of toil which go into every number. Most readers have no conception of what it means to make a deadline. There is the constant struggle for adequate material, the revision of manuscripts, the writing and rewriting of much of the contents, proofreading, and numerous details incidental to publication which require attention.

In these circumstances, it is not too surprising that there is a tendency on the part of the staff to be unduly sensitive about the Annals' imperfections. There is a natural inclination to resent criticism and to be pained by indifference. The fact is, however, that they can ill afford to be too thin-skinned if their publication is to merit continued approval.

The Medical Annals is generally regarded by editors of state medical journals as one of the best of its kind; nevertheless, the Editor and Editorial Board are aware of the opportunities for improvement. Their appraisal of the Annals at the moment would perhaps be something like this:

> In appearance the Medical Annals is both dignified and attractive. From time to time, however, it must put on a fresh look. The new cover on this issue is an example. Modernization of format should receive attention in the not too distant future.
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> The scientific material has generally been of good quality. This has been due largely to the energy and skill of the Editor. Unfortunately, he reports there has been a lack of enough good material in the past few months. This is a surprising situation when one considers the importance of Washington as a medical center. If the best scientific material available here were submitted to the the Annals, the Society's journal would rank with the best medical publications in this country. Efforts to remedy the situation will require the wholehearted coöperation of the Editorial Board and the Society's membership.
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> The section of the journal devoted to general subjects, which begins with the editorials, has received much favorable comment, but here too a reappraisal is indicated. It may be desirable to discontinue some features, to curtail others, or to make substitutions.

The Editorial Board will consider ways and means of improving the Annals at its annual meeting on January 7. As these comments are being written late in December, actions taken by the Board will be reported by your Observer at a later date. It is his belief, however, that under the Board's direction the New Year will be one of real progress for the Society's publication.

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Our Crystal Ball

How much the thinking of the AMA leadership has changed since the close of World War II was emphasized at the Association's Fifth Medical Public Relations Conference held in Denver last December. A solid day's program was devoted to various methods of creating public goodwill and winning public support.

By all odds, the most important contribution to the program was an address by Dr. Edward J. McCormick, President-elect of the AMA. Dr. McCormick minced no words, praising where he thought it was due and criticizing where he thought it was warranted. It was one of the most forthright and constructive talks on public relations by an AMA official which your Observer has heard. He endeavored to obtain a text of the address, but at several points Dr. McCormick had departed from his prepared manuscript and it was decided to withhold release until his interpolations could be included. Undoubtedly, the address will appear in an early issue of the *Journal of the American Medical Association.* Your Observer recommends it as "must" reading for physicians.

Dr. McCormick's observations were especially encouraging to your Observer because they were not hedged about with qualifications. It was apparent that an honest effort was being made to evaluate the public relations activities of organized medicine. Your Observer is convinced that the large expenditures being made by the AMA and by state and county medical societies for ambitious public relations programs can only be justified by this approach.

What will be the long-range effect of the present medical public relations programs? Will they materially alter social trends where medicine is concerned? Obviously, no one can say with certainty, but your Observer, with characteristic temerity, is willing to hazard a few opinions.

Most significant is the world-wide struggle now in progress between the have and the have-nots. Everywhere there is a cry for equality of opportunity and a higher standard of living. Large segments of the population in our own country have banded themselves together for the avowed purpose of improving their lot. An example is organized labor. There have been stirrings, too, among the so-called white collar group, but, so far, no real leadership has asserted itself. In the face of these developments, there is little likelihood that demands for "the better life" will abate.

Those who look upon the recent election as a repudiation of this philosophy are doomed to disappointment. The new Chief Executive has given no encouragement to this belief. In fact, he has said that social gains must be extended. So it seems that, no matter how much we may decry what is happening, efforts to level our people socially and economically are on the way to becoming a reality.

Obviously, these developments will have a profound effect upon medicine. Voluntary health insurance plans, which are still in their infancy, will, if they provide adequate coverage at reasonable cost and if they have the support of the public and the medical profession, play an ever greater role in our society. Physicians will come to realize, if they have not already done so, that the success of these plans means a great deal to their patients, as well as to themselves. As larger numbers of the population are protected by them, more restrictions will of necessity be placed on physicians where their services and charges are concerned. They will chafe at these restrictions, but there is no other way. At least, these plans will be administered and under the control of their colleagues.

Your Observer would give voluntary health insurance plans under sound leadership a good chance of surviving the experimental stage. If he is correct in this, it will mean that the pattern established will not be easily disturbed. Doctors will continue to be masters in their own house. Both as individuals and as a group, they will have won the confidence and support of the people.

Obviously, what your Observer sees in his crystal ball has made him optimistic. There is, however, one cloud in the picture. That is the highly inflammable international situation. A conflagration could easily upset his predictions within a matter of hours. There is little point, however, in dwelling on such an appalling prospect.

Your Observer would regret to see organized medicine carried away by its enthusiasm for the superficial aspects of medical public relations programs. Now is the time to weigh them carefully in an effort to determine their effect upon the future welfare of the public and the medical profession.

Group Coverage Cancelled—1953

The professional liability insurance situation in the District, it appears, will become worse before it is better. Conferences and correspondence with officials of A. H. Baker and Company, Inc., General Agents for United States Fidelity and Guaranty Company, have culminated in a notice to the Society that "for various reasons" the USF&G "has decided to withdraw from underwriting of group professional liability policies" and that effective May 1, 1953, the anniversary date of the Society's policy, it will be cancelled.

Among the reasons given for cancellation are that losses sustained by the Company do not justify its continuance of group underwriting. For some six years, with the exception of the year 1951, when the income from premiums exceeded expenditures, the Company has been writing this business at a loss.

An aspect of this situation which should be made clear to the Society's membership is that it is not local in nature. The USF&G has decided to cancel all of its group professional liability insurance policies throughout the country. Communications from state and county medical societies also reveal that other companies contemplate following suit.

What this means to physicians in the District is that after May 1, 1953 the Company will write selected risks on an individual basis only. Physicians in some specialties will find their coverage far more costly than at present. In fact, insurance premiums in all risks will rise sharply.

The Committee on Medical Ethics and Deportment, which is endeavoring to get the USF&G to reverse its decision, voted at its last meeting on November 17, 1952 to: (1) extend an invitation to top officials of the USF&G to review the professional liability insurance situation in Washington; (2) direct a letter and questionnaire to all state medical societies requesting data with respect to their experience with group professional liability policies; and (3) have a digest prepared of the data obtained for the Committee's information.

Your Observer has maintained that group professional liability coverage is desirable from many points of view. First of all, physicians protected under a group arrangement receive more consideration and better service than do individual policy-holders. Furthermore, an insurance company doing business with a group finds it more profitable than writing individual policies, provided the premiums are adequate.

Since the Committee met, the AMA's House of Delegates has held its sessions in Denver. At this meeting Dr. Herbert P. Ramsey, Senior Delegate from the District of Columbia, introduced the following resolution:

> "WHEREAS the substantial increase in premium rates for professional liability insurance and the discontinuance of group underwriting by major casualty insurance companies in many parts of the country is symptomatic of an unhealthy situation;
>
> "WHEREAS contributing factors are urgently in need of careful investigation;
>
> "BE IT RESOLVED that the Board of Trustees of the American Medical Association be directed to make an immediate study of the professional liability insurance situation and submit its findings to the House of Delegates at its next meeting, in the meanwhile taking such action as may be appropriate."

This resolution was approved by the House substantially as it appears here. The AMA's Board of Trustees was directed to have one of its Councils make an investigation and submit a report to the Board, which it was asked to present to the House at its next meeting in June.

In the meantime, the Committee has not given up hope of obtaining group coverage. As previously stated, it has extended an invitation through an official of the Baker Company to high officials of the USF & G to come to Washington to discuss the situation. What the result will be if they accept remains to be seen. In any event, the Society's membership will be kept informed of developments.

An Intriguing Solution

The need for instruction of senior medical students in such practical subjects as office management, financial records, proper handling of patients' accounts, the more common medicolegal procedures, life and other insurance, investments and medical ethics has been mentioned frequently in this column. Your Observer has also related his experiences with young physicians, and older ones too, who have expressed deep regret that they had not been adequately trained to cope with economic problems in private practice.

He had hoped that his lectures at Marquette University School of Medicine on various phases of practical medical economics in the early 30's would stimulate other medical schools to initiate similar lectures. A few did, but most heads of medical schools were either disinterested or were of the opinion that their curricula were already overloaded with essential courses. Then, too, there was the problem of obtaining lecturers. Physicians competent to discuss the business side of medicine were too occupied with their own affairs to give the time required, and few laymen had sufficient background in medicine to do justice to such an assignment. It is not surprising, then, that there has been little progress in this phase of medical instruction.

At its last meeting the Society's Executive Board approved an experiment to be known as The Question Hour, which may at least partially meet this need. The Question Hour, which was described in the November 1951 issue of the Medical Annals, contemplates the participation of residents and internes in a question-and-answer program on the economics of medicine. Questions will be submitted in advance to a panel consisting of a medical practitioner whose views on efficiency in the doctor's office are backed up by long experience, an attorney familiar with the legal problems confronting the physician, an administrator who has been associated with physicians for many years, a public official familiar with the laws relating to licensure, and an insurance man of wide experience.

The first Hour, which is being planned by the Special Committee on Teaching Technics, will be held at Gallinger Municipal Hospital on April 9, 1953. This announcement, the Committee has been informed, "provoked . . . enthusiastic comment" among the residents and internes at Gallinger Hospital.

Naturally, such favorable reaction is pleasing to the Committee, and it hopes that the Hour will prove to be all that is expected of it. The fact is that, even though it lives up to expectations, the instruction will at best be fragmentary in nature. It will, however, serve to stimulate the participant's interest in further investigation.

On his recent trip to Denver your Observer was discussing this matter with a well known medical educator, who is also a practicing physician. This doctor observed that the indifference of medical schools to a course on the business aspects of private practice was not surprising. Often full-time physicians on medical school faculties, he pointed out, have never engaged in private practice. Having little or no conception of the problems confronting private practitioners, they are understandably indifferent to the inclusion of "business" lectures in a medical training program. In fact, my friend said, these men live in "ivory towers," and if their interest and coöperation are to be obtained they must be brought to realize how inadequately their students are prepared to cope with the problems of everyday private practice.

The more he thought about these observations, the more your Observer was convinced of their merit. Why not invite selected faculty members of medical schools to participate in the Question Hour? It was an intriguing thought and he resolved to explore it further.

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The Story of Anesthesia

On a morning not so long ago, as he was looking through his mail, your Observer reflected upon the growing volume of newsletters, bulletins, pamphlets and announcements received in the Society's office from medical organizations. Most of this material was not only attractive from the standpoint of format and typography but gave evidence of thoughtful preparation. Unfortunately, your Observer did not have time to read even a fraction of it and he wondered if this were not true of most people as busy as he is.

His thoughts turned to the cost of printed matter. The more attractive brochures, he knew, were expensive. They require the services of commercial artists, printers, proofreaders and often skilled writers. What a bonanza this must be for many people connected in one way or another with printing establishments.

It was in the midst of these ruminations that he came across an unusually attractive pamphlet entitled "The Story of Anesthesia" prepared for public distribution by the American Society of Anesthesiologists. He placed it in his inside coat pocket resolved to read it at the first opportunity. As he did so, he recalled hearing a group of physicians discuss the dangers of modern anesthetic agents in the hands of non-medically trained personnel. All the more reason, he thought, to read the pamphlet.

Some weeks later when he was removing things from his pocket he discovered the pamphlet. It happened to be an opportune time for him to examine it rather carefully. The result was his decision to direct the attention of the readers of this column to one of the best things of this sort he has seen. He recommends it as a model to any organization which wishes to tell its story to the laity.

It seems to your Observer that too often medical organizations overlook the fact that people are primarily concerned with their personal problems. They want to know how best to safeguard their health and, in the event of serious illness, where and how to obtain good medical service. Only a minority concern themselves with broader health problems. How well the writer of "The Story of Anesthesia" has recognized this fact is illustrated by the following excerpts:

> "With improved anesthesia, together with better care before and after the operation, many procedures may now be performed on patients whose condition would have been considered inoperable a few years ago. Modern anesthesia thus has removed one critical factor limiting the scope of surgeons and obstetricians. While ether is still a fine anesthetic for many purposes, it is only one of many drugs now used by the anesthesiologist, each of them with special benefits and special purposes.
>
> "Some of the others in common use are:
>
> Cyclopropane
> Curare
> Pentothal
> Avertin
> Trichlorethylene
> Syncurine
> Surital
> Pontocaine
> Chloroform
> Vinethene
> Ethyl Chloride
> Scopolamine
>
> "There are many other anesthetic agents too numerous to list. Each one can contribute much to the comfort and safety of patients in any operation, no matter how minor.
>
> "They should be administered only after judicious evaluation of each individual who is to receive them. Many are awesomely powerful, among the most potent drugs administered to human beings.
>
> "When administered correctly, they are life-giving anesthetic agents. Handled unwisely by anyone without proper training, they are lethal.
>
> "Not only are many of these drugs new, but so are the technics by which they are applied to patients. For example, there are many critical operations on the chest and abdomen during which patients cannot breathe adequately without interfering with the surgeon's work. The anesthesiologist will carry out methods of artificial, positive pressure, or assisted respiration. He will supply the vital oxygen directly into the lungs by inserting a rubber or plastic artificial airway through the vocal cords down into the trachea.
>
> "Only highly trained physicians can select and administer these potent drugs and intricate technics with adequate safety for every patient . . . that is, for you. The anesthesiologist who carries on this work is a doctor of medicine who has been graduated from a qualified medical school, served as an intern, then taken special training in anesthesia procedures for one or two years more, or has had long experience in the specialty."

There follows a description of the anesthesiologist's responsibilities to his patient and how he functions before and during an operation.

Your Observer's congratulations go the the American Society of Anesthesiologists for its well told story. Physicians would do well, regardless of their type of practice, to place a few of these pamphlets in their waiting rooms. Copies can be obtained through the Society's offices.

T. W.

THE INITIAL MANAGEMENT OF PATIENTS WITH THORACIC INJURIES*

This brief summary of the initial management of thoracic injuries is presented to assist physicians in making a more accurate appraisal of the problems encountered and to facilitate more effective early treatment. For obvious anatomic reasons a large group of individuals with thoracic injuries die before there is an opportunity to render medical aid. Another group of patients with thoracic injuries will survive, even if untreated, and therefore require little discussion here. Others will survive for limited periods but will succumb unless early and proper treatment is available. It is with this group that we are especially concerned. The nonoperative measures and less formidable operative procedures are stressed. Late developments and complications are omitted since it should be possible to care for them under more ideal circumstances. Discussions of such problems as traumatic shock, chemotherapy, oxygen therapy, and the use of the ordinary drugs are readily available and are to a large extent omitted from this discussion.

Thoracic injuries may be classified as:

1. Injuries involving only the thoracic wall. These may be due to blunt force or to tangential wounds. Such injuries may produce:
   a. Local reaction alone, or
   b. Mild to grave disturbances in cardiorespiratory function.
2. Intrathoracic injuries which may be the result of:
   a. Nonpenetrating wounds (blunt force). These may produce extensive damage to such intrathoracic organs as the lungs, heart or esophagus, and may therefore result in hemorrhage, infection, or disturbances in cardiorespiratory function.
   b. Penetrating wounds. The term "penetrating" used in relation to wounds of the thorax signifies that the thoracic cavity has been entered. Penetrating used in relation to the heart would indicate that the heart had been entered by the weapon or missile. As generally used, it signifies entrance into one of the cardiac chambers.
   c. Perforating wounds. The term "perforating" indicates passage through, and, when used to describe wounds of the chest or heart, it would indicate that the part or organ, including both walls, had been completely traversed.

In the initial management of thoracic injuries one is concerned with (1) the correction of conditions which produce disturbances of cardiorespiratory function, (2) the control of hemorrhage, and (3) the prevention of infection. Since the control of hemorrhage is carried out in essentially the same manner as in other parts of the body, and prevention of infection poses no problems peculiar to the thorax, neither subject is discussed in detail here. On the other hand, certain injuries produce important changes in cardiorespiratory function, changes which give rise to characteristic symptoms and signs. It is necessary that the physician who has the responsibility for the care of patients with thoracic injuries be familiar with these changes, the manner in which they are produced, the physical signs and symptoms associated with them, and, finally, the most effective measures for their relief.

Several all-important conditions develop only as a result of chest injuries. These may occur singly or in combination in patients with chest injuries from any cause. Unrecognized and therefore without proper management, the results are necessarily poor. If recognized and their mode of production understood, treatment may be simple. These conditions are:

1. Retention of bronchial secretions with inadequate pulmonary aeration, caused by:
   a. Severe pain in the chest wall.
   b. Abnormal mobility of the chest wall.
   c. Depression of the cough reflex through
      (1) Unconsciousness, or
      (2) Administration of excessive amounts of opiates.
2. Open chest wall with the "sucking sound" phenomenon. A similar condition is produced by extensive rib fractures with resultant excess mobility of a considerable segment of the chest wall, the so-called "flail chest."
3. Pressure or tension pneumothorax with or without mediastinal emphysema.
4. Cardiac tamponade.
5. Massive hemothorax.

Since adequate treatment of these conditions will correct the resulting cardiorespiratory disturbances and thereby aid in resuscitation of the patient, each condition will be discussed in some detail.

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* This is the twelfth in a series of articles especially prepared for the Committee on Trauma of the American College of Surgeons and distributed by the Committee through its Regional Committees.

Pain in the chest wall may have serious consequences in injuries which otherwise would be of no great importance. Pain may effectively immobilize the chest wall, thereby making cough ineffectual. This results in retention of tracheobronchial secretions and/or aspirated material. The accumulation of such material in the bronchi interferes with pulmonary ventilation and leads to atelectasis and perhaps even to suppurative pneumonitis. If inadequately treated, such patients may actually go on to asphyxiation. Recognition of such a situation is not difficult. The patient complains of pain on respiration and on coughing. Cough is ineffectual, and auscultation reveals moist rales and/or rhonchi widely distributed over both lungs. More severe cases show dyspnea and cyanosis.

Treatment is directed toward relief of the pain and clearing the airway of secretions. Pain is relieved by injecting the intercostal nerves of the involved area with 1 per cent procaine. This is injected in small quantities (5–10 c.c.) below the inferior costal margin, posterior to the angle of the rib. Care is taken not to enter the pleural cavity. It is advisable to inject 2 interspaces above and 2 below the obvious area of injury. The procedure is repeated as required. In early or mild cases this will suffice. Adhesive strapping is inadvisable, except when needed for the stabilization of certain flail chest walls.

Patients with retained secretions should have immediate aspiration by nasotracheal catheter. Tracheal suction is easily done, and physicians treating patients with thoracic injuries must familiarize themselves with its technic. With the use of a fairly stiff catheter (16–18 French), the patient is placed in the sitting or semi-sitting position with the back supported, and the head and neck dorsally extended. The lubricated catheter is quickly passed through the nose into the pharynx without suction attached. The patient is instructed to take a deep breath and during inspiration the catheter is passed into the trachea. Success is signified by violent coughing and hoarseness. If the patient gags, the catheter is in the esophagus, not in the trachea. Suction is applied intermittently as the catheter is passed into the tracheobronchial tree. Both sides should be aspirated. In some patients effective aspiration can be accomplished only by means of the Bronchoscope. Oxygen by nasal catheter is administered if there is evidence of hypoxia. It should be stressed that opiates must be used with particular care in patients with excessive bronchial secretions, and especially in patients who have difficulty in evacuating these secretions.

The importance of an open, adequate airway cannot be overemphasized. In patients with serious cervical or facial injury or in any condition in which suction or bronchoscopy is not feasible, or in which excessive irritation has been produced by gas or smoke, it is advisable to perform a low tracheotomy in order that catheter aspiration can be adequately accomplished.

Open chest injuries produce profound disturbances in intrathoracic physiology. Because of the opening in the chest wall, negative intrapleural pressure is replaced by atmospheric pressure. A number of factors determine the severity of the effects on cardiorespiratory function, the most important being the size of the opening in the chest wall. Small openings are in general better tolerated than large ones. If the size of the opening approaches or exceeds the size of the glottis, the patient may get into serious difficulty. Other important factors are the type of wound and the mobility of the mediastinum. If the wound allows air to enter the pleural space but does not permit it to escape, the patient's condition deteriorates more rapidly. Since the mediastinum is usually quite mobile, open pneumothorax generally leads to a shift of the mediastinum to the opposite side, with compression of the contralateral lung as well as the lung on the side of injury. The swing of the mediastinum with each respiratory cycle causes poor air exchange and also interferes with the return of venous blood to the heart.

Smaller wounds of this type which give rise to the characteristic sound of air entering or being expelled from the chest have long been known as "sucking wounds." Since this term has no significance apart from the altered conditions produced by an open pneumothorax, and since wounds often change from the closed to the open type, or vice versa, with changes in tissue plane alignment, there seems to be no logical reason to retain the term. All penetrating injuries of the chest wall are to be considered open (sucking) until careful inspection or actual débridement prove them to be otherwise.

Open wounds must be effectively closed as soon as possible. As an emergency measure a simple occlusive dressing of vaseline gauze is adequate. When the patient has been removed to a location where facilities are adequate, the wound is débrided and an airtight pleuromuscular closure is done. A large catheter (34–45F) is inserted through an intercostal space into the pleural cavity and is connected to a water-seal arrangement (for evacuation of air and fluid). The wound will be discussed later.

Flail chest is always a serious occurrence, and, if the mobilized segment of chest wall is large, it may even be life-endangering. Milder cases are adequately handled by intercostal nerve block supplemented by a stabilizing pressure dressing secured by elastic adhesive. More severe injuries may require the insertion under aseptic precautions of a sterile towel clip around the central rib of the flail segment and the application of light traction. Traction may be obtained by a cord attached to a weight, usually about 5 pounds, suspended over a single pulley attached to an overhead frame. The intercostal nerves of the involved area should be injected with procaine. Oxygen should be administered.

The terms "pressure" or "tension pneumothorax" indicate the accumulation of sufficient air in the pleural cavity to compress the lung and thereby seriously interfere with ventilation. If the mediastinum is not fixed by adhesions, the opposite lung may also be compressed.

Patients with pressure or tension pneumothorax are usually dyspneic and cyanotic. The combination of hypoxia and interference with cardiac filling leads to circulatory collapse. There is no essential difference in the effects of this condition from those produced by open pneumothorax or by flail chest. The trachea and heart shift to the uninjured side.

Treatment consists of (1) decompression, (2) relief of pain by injecting the intercostal nerves on the injured side, and (3) clearing the airway by catheter suction. Manometric determination of the intrapleural pressure is desirable but is not essential. The best way to decompress the pleural space is to insert a soft rubber intercostal catheter connected to a water-seal system into the pleural space through the midclavicular line anteriorly (figure 1). In an emergency air may be removed continuously by use of a large-bore needle, a syringe, and a 3-way stopcock. Oxygen is administered. If there is rapid leakage of air (as through a wound in a large bronchus), open thoracotomy is necessary. This problem will be discussed more fully in a subsequent section.

Mediastinal emphysema (emphysema may be subcutaneous or mediastinal) may occur in association with tension or pressure pneumothorax. Such a combination usually indicates a serious underlying injury. Collections of air limited to the subcutaneous tissues may reach startling proportions, but fortunately in the absence of gas-forming pathogens seldom endanger life. Air under pressure in the mediastinum interferes with the venous return and may also cause tracheal obstruction.

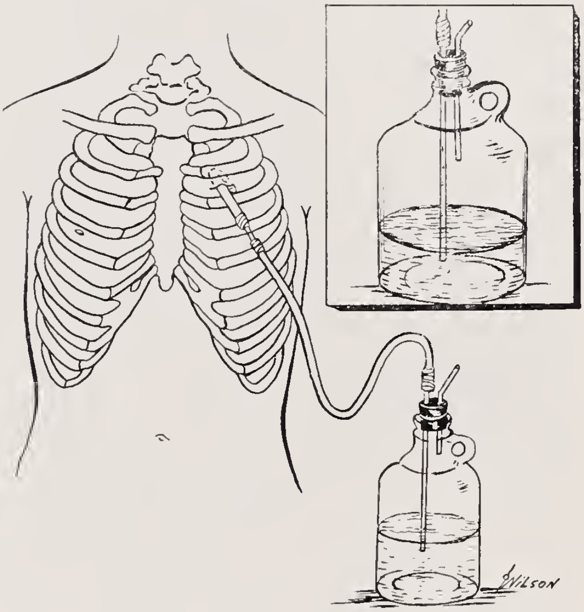

FIG. 1. Intercostal drain with water trap system

Air gains access into the mediastinum through perforations of the esophagus, the trachea or mediastinal portions of the main stem bronchi. Also air may dissect along the bronchi and/or blood vessels and gain access to the mediastinum from the lung. In extensive mediastinal emphysema there is apt to be swelling of the neck. In some cases the mediastinal emphysema is associated with subcutaneous air. The diagnosis of mediastinal emphysema is made by hearing the so-called "mediastinal crunch" with the stethoscope and visualizing the air by roentgenography. In cases in which air dissects up into the base of the neck the distinctive crepitation produced by air in the tissues is easily elicited.

Treatment ultimately should be directed toward correction of the underlying lesion. If a tension pneumothorax is present, a catheter is inserted into the pleural space and is connected to a water-seal device. If air is present in the mediastinum under sufficient pressure to cause labored respirations and circulatory impairment, a collar-type incision should be made at the base of the neck and a finger introduced into the superior mediastinum, thereby permitting the ready escape for air. If the air in the mediastinum is the result of laceration of the trachea or esophagus, open thoracotomy is indicated.

Massive accumulations of blood in the pleural cavity may produce serious disturbances, as well as the effects of blood loss. These disturbances may be reductions in lung volume and vital capacity, reduced cardiac filling from obstruction of the mediastinal veins, and compression of the contralateral lung, the result of mediastinal shift. Recognition of these conditions is not difficult. These patients show dyspnea and pallid cyanosis, the percussion note is flat, and the breath and voice sounds are usually distant over the greater part of the chest, but the breath sounds may have a bronchial character posteriorly near the spine. A free return of blood on thoracentesis confirms the diagnosis.

Treatment is directed toward evacuation of blood from the pleural cavity and restoration of the blood volume. Initially, sufficient blood should be removed to relieve the respiratory distress and mediastinal venous obstruction. Meantime, sufficient blood should be administered to restore the blood volume and content to normal. In an emergency, blood from the pleural cavity may be citrated, filtered and autotransfused if there is no gross contamination and if the injury is of short duration. Because of the danger of hemolysis autotransfusion is unsafe if the injury is of more than 12 hours' duration. Aspiration of the pleural cavity should be repeated at frequent intervals until the blood has been completely evacuated and the lung has expanded. As much as 1,000 c.c. of blood may be withdrawn if the patient develops no untoward symptoms such as cough, faintness, chest pain, or tightness. Aspiration may be repeated in from 3 to 4 hours. Oxygen is given by nasal catheter. Chest wall pain is relieved and adequate respiratory excursions restored by blocking the intercostal nerves with 1 per cent procaine.

No chest wound can be said to be progressing satisfactorily unless the following results have been or are being achieved:

1. Bleeding adequately controlled.
2. The patient totally resuscitated.
3. The tracheobronchial tree satisfactorily cleared.
4. The chest wall stable and painless to the extent that cough and aeration are effective.
5. No significant circulatory disturbances present.
6. All wounds properly débrided and dressed.
7. Pleural space free or being freed of blood and/or air.
8. Lung expanded or expanding.

Indications for immediate surgery in chest injuries are closely allied to the correction of disturbed cardiorespiratory function, since operation may be necessary for correction. Surgery undertaken without accurate evaluation of these factors is doomed to failure. Certain conditions require immediate surgery, due consideration being given to resuscitation measures. The more important of these conditions are:

1. Open chest wall wound
2. Continued intrathoracic bleeding
3. Thoraco-abdominal injuries
4. Esophageal injuries
5. Progressive and rapid accumulation of air in the thorax
6. Certain cardiac injuries.

Open Chest Wall Wound. The principles of initial wound care of chest injuries are the same as of wounds elsewhere. They include thorough débridement or wound excision by bold and generous incision, the opening of muscle planes, and wide exposure of the depth of the wound. Minimal removal of skin edges is practiced, and especial care should be exercised to remove all devitalized or contaminated muscle, fascia, and foreign bodies (clothing, débris, missiles, loose bone fragments). Direct inspection of the extent of the wound assures the protection of major nerves and blood vessels as well as thorough hemostasis. The wound should be left open if grossly contaminated, if extensive tissue damage is present, and if there is a possibility of a foreign body remaining. If the wound is left open, the wound edges are covered with fine mesh gauze and an adequate dressing applied. If the pleural space has not been opened by the injury, débridement should be carried out so as to preserve its integrity.

If the pleura has been penetrated, foreign material loose in the pleural space and devitalized tissues are sought out and carefully removed. Lacerations of the lung should be sutured. Large quantities of warm physiologic saline solution are used to lavage the pleural space. Antibiotics are applied intrapleurally, and an airtight closure of the chest wall defect is made, if necessary by the use of pedicled muscle flaps. Drainage is obtained by placing catheters (34–45F) in the intercostal spaces anteriorly and posterolaterally, each catheter being connected with an underwater-seal system. Suction is seldom indicated during the first 48 hours after operation.

Intrathoracic Bleeding. Intrathoracic bleeding must be controlled. Continued bleeding is often from the intercostal or internal mammary vessels, and, if it is not possible to control it by other means, thoracotomy is necessary. Injury to the larger systemic intrathoracic vessels, such as the aorta, is generally rapidly fatal, but patients occasionally survive injury to large pulmonary vessels. Continued severe bleeding from the smaller vessels of the lung is of infrequent occurrence. Careful appraisal of all the problems presented is necessary in making the decision as to whether or not to do a thoracotomy. Features which aid in the decision regarding thoracotomy are: (a) rapid reaccumulation of blood in the pleural space (removal of as much as 2,000 c.c. of blood within 24 hours does not afford proof of continuing bleeding but does strongly suggest it); and (b) patients in shock who do not show continued improvement following the administration of what would seem to be adequate amounts of blood. For example, if the blood pressure fails to rise to a relatively normal level (above 100 mg. Hg systolic) after 1,500 to 2.000 c.c. of blood or shows only a transient rise after such an amount of blood, thoracotomy is in order.

Thoraco-abdominal Injuries. Thoracic injuries without continued bleeding or complicated by other important injuries rarely show persistent shock when the disturbances in cardiorespiratory function have been corrected. The individual with thoracic injury who shows persistent shock in the absence of serious extrathoracic wounds should be suspected of having continued bleeding or gross contamination of the peritoneal and/or pleural spaces, possibly the result of transdiaphragmatic visceral injury. Blood and bile may be sucked into the chest in right-sided thoraco-abdominal wounds. Prompt operation is required in such patients. Continued bleeding due to injury of the heart is discussed elsewhere.

Intra-abdominal hollow viscus perforation or injury of a solid organ such as the liver or spleen in association with intrathoracic injury makes immediate operation mandatory. However, due regard must be given to resuscitation measures. Physical examination together with knowledge of the probable course of the injuring agent helps in detecting the presence of an abdominal injury. Roentgenograms may be of value. Intercostal nerve block is valuable as a therapeutic and as a diagnostic measure, since it usually relieves the abdominal pain and tenderness on the corresponding side if due solely to thoracic trauma. Persistent rebound tenderness generally means peritoneal irritation and, therefore, requires exploration of the abdomen. Shock is usually more marked in thoraco-abdominal injuries than in thoracic injury alone. The associated abdominal wound is especially dangerous because of the likelihood of bacterial contamination, both of the peritoneum and the pleura. Early operation is therefore necessary.

Preoperative correction of altered intrathoracic physiology, endotracheal anesthesia, and complete reëxpansion of the lung at the close of the thoracic phase of the operation are essential safety measures. Thus, the thoracic part of the operation should usually be accomplished first. The surgical approach may be by thoracotomy, thoracolaparotomy, or by laparotomy alone. If the diaphragm is not injured, the approach to the abdominal viscera should be by laparotomy. If the left diaphragm is injured, the combined thoraco-abdominal approach may be used, but frequently both the thoracic and abdominal conditions can be satisfactorily cared for by entrance to the thorax through the bed of the ninth rib and exposure of the organs in the left upper abdomen by wide incision of the diaphragm. On the right side, abdominal injuries are best exposed by laparotomy while treatment of the thoracic injuries and repair of the diaphragm are best accomplished by thoracotomy. The diaphragm should be repaired with interrupted cotton or silk suture. Liver injury requires drainage by adequate subcostal incision. Rubber tissue drains are placed dependently and are left in place for at least ten days. The pleural space is drained by catheters (34–45F) placed anteriorly and posterolaterally and connected with water-seal systems. When early adequate treatment is given, the mortality from combined thoraco-abdominal injuries should not be appreciably greater than the mortality from abdominal injuries alone.

Esophageal Injuries. Perforations or lacerations of the esophagus warrant early transpleural thoracotomy. Esophageal perforation may be demonstrated roentgenographically (including fluoroscopy) by having the patient swallow iodochloral or lipiodol. Barium must not be used. Further evidence may be obtained regarding perforation by having the patient swallow 5 c.c. of tincture of methylene blue in 30 c.c. of sterile water and by recovering the blue fluid at thoracentesis. It may also help the surgeon locate the injury at operation. When positive evidence of esophageal perforation cannot be established, large doses of antibiotics are given and the patient is observed for a few hours. If the patient's condition deteriorates, prompt thoracotomy is indicated. The perforation in the esophagus is sutured, the mediastinal pleura is left open, and drainage of the pleural space is established through 2 catheters (34–45F), 1 inserted through an anterior interspace, the other posterolaterally. Each catheter is connected with a water-seal system.

Accumulation of Air in the Thorax. The rapid and progressive accumulation of air in the thorax usually indicates injury of one of the large bronchi or intrathoracic portion of the trachea and is an indication for immediate surgery. Simple tension or pressure pneumothorax is considered elsewhere. Failure of the lung to expand is an indication of such an injury. Repair of injury to a large bronchus or trachea may be accomplished by using interrupted sutures to close the laceration and then by reinforcing the suture with a flap of mediastinal pleura. If repair is not feasible, excision of the affected lobe or lung may be necessary. When pulmonary resection is necessary, the proximal bronchus is closed with interrupted fine silk suture. If the patient's condition is precarious, proximal mass ligation may be life-saving until facilities are available for definitive surgery.

Patients with associated injuries of other organs or parts, for instance, the urinary tract, head, or extremities, which may also require early surgery, will usually be given a better chance for recovery if the thoracic injuries are treated before other operative procedures are undertaken. When there are associated injuries of the extremities, the patient should not be immobilized in a manner which will interfere with coughing and clearing the tracheobronchial tree of secretions.

Cardiac Injuries. The heart may be injured by nonpenetrating, penetrating, or perforating thoracic injuries. Contusion of the heart probably occurs more frequently than is realized and, rarely, rupture of one of the cardiac chambers occurs as the result of heavy blows or crushing force over the precordium. However, the great majority of heart wounds are the result of penetrating or perforating wounds. Penetrating wounds often give rise to cardiac tamponade, in which case there may be little actual blood loss. Perforating wounds of the heart usually result in massive hemorrhage into one of the pleural cavities and occasionally to the outside, but, in perforating wounds of one of the ventricles, blood may escape from the heart more rapidly than from the pericardial sac, thus producing the picture of cardiac tamponade plus severe blood loss. It is important that this latter situation be recognized at once.

Cardiac tamponade is usually the result of wounds which penetrate the chest wall in the area in which the pericardium is not covered by pleura so that the weapon or missile passes directly through the pericardium and myocardium into one of the cardiac chambers without traversing the pleural space. Blood rapidly fills the pericardial sac and, as that structure becomes distended, the opening in the pericardium is displaced away from the opening in the chest wall. As a result there is usually little bleeding to the outside. As the intrapericardial pressure increases, the entrance of venous blood into the auricles is seriously impeded and circulation approaches a standstill.

During this phase the physical findings are characteristic. The most significant are (1) low arterial pressure, (2) low pulse pressure, (3) high venous pressure (most readily demonstrated by inspecting and palpating the external jugular veins), (4) faint heart sounds, and (5) heart rate slow in relation to blood pressure. Fluoroscopic examination shows an apparently immobile cardiac shadow, and this confirms the diagnosis of cardiac tamponade.

Initial treatment is as follows: (1) Place the patient in moderate Trendelenburg position; (2) give morphine, grain $^1/_6$ to $^1/_4$, and atropine $^1/_{100}$ to $^1/_{50}$ grain (if pulse rate is excessively slow, atropine, grain $^1/_{100}$, should be administered intravenously); (3) administer intravenous fluids, since they are of temporary value and should be started at once (5 per cent dextrose in sterile water or, when available, plasma or blood); and (4) perform pericardicentesis, which is by far the most important of the nonoperative measures.

Pericardicentesis is more safely done by the left costoxiphoid route, since the danger of injury to the heart wall, and especially to one of the coronary arteries, is largely avoided. For pericardicentesis by the left costoxiphoid route, a 10 cm., 18- to 19-gauge, short-beveled needle should be employed. The skin is punctured by a sharp-pointed knife blade, about 2 cm. below the costal border, adjacent to the xiphoid. The needle is inserted at an angle of 45° to the abdominal wall and passed upward and backward for 4 to 5 cm. or until the point seems to enter a cavity. The plunger is gently withdrawn, and, if no blood is obtained, a stylet is inserted to be certain the needle is not plugged by tissue. The needle is then carefully passed to a deeper level until blood is obtained or until cardiac pulsations are felt. The removal of even a few ounces of blood is followed by dramatic improvement, which may be persistent or transient. Rarely aspiration will be unsuccessful because of clotting of the blood in the pericardial sac. When this occurs, thoracotomy is usually necessary. If aspiration is successful and there is no recurrence of the signs of tamponade, conservative treatment is continued. If, after a considerable lapse of time tamponade recurs, aspiration should be repeated (the needle may be temporarily left in place for this purpose, but only after it has been determined that the point is not in contact with the heart wall). When tamponade recurs rapidly, immediate cardiorrhaphy is indicated.

Wounds of the heart should be operated upon promptly under the following circumstances:

1. When tamponade cannot be relieved by pericardicentesis because of clotting of blood within the pericardial sac.
2. When tamponade due to failure of the wound to seal off continues or recurs rapidly, or
3. When bleeding into the chest cavity or to the outside continues.

Otherwise heart wounds should be treated conservatively, at least until the operation (including pericardicentesis) can be performed under satisfactory conditions.

Cardiorrhaphy. If differential pressure anesthesia is available, a transpleural approach through a long incision in the third and fourth intercostal spaces anteriorly is preferable. If additional exposure is necessary, the adjacent cartilages may be divided at the sternum. Where proper facilities are not available for differential pressure anesthesia, the operation may be performed extrapleurally under regional block and local infiltration anesthesia. When the latter method is employed, a curved, left parasternal incision is best, and usually 3 cartilages and segments of the corresponding ribs (3, 4 and 5) are resected subperiosteally. The internal mammary vessels and the corresponding intercostal arteries are ligated, and the prepericardial areolar tissue is incised perpendicularly near the sternal border and dissected to the left, carrying the pleural fold with it. The pericardium is opened widely, the blood is removed by suction, and the wound is located. Bleeding is controlled by pressure over the wound with the index finger of the left hand, and a deep traction suture is passed beneath the compressing finger. Slight traction on this suture will largely control bleeding while the approximating sutures are placed and tied. The traction suture is then removed. Cardiorrhaphy is best done with interrupted sutures of medium, 000 or 0000 silk on a slender curved needle. Apical traction sutures should be employed only when the wound is difficult of exposure. The pericardium is closed with a few widely spaced interrupted sutures. In the presence of excessive cardiac irritability the intrapericardial injection of 10 c.c. of 2 per cent procaine is advisable. Drains are not placed within the pericardial sac.

In rare instances patients with wounds perforating the pericardium and heart will survive for considerable periods. Such cases may lead to confusion and delay because of the combination of signs of cardiac tamponade and massive hemothorax. This combination of findings indicates a grave prognosis, but, if conditions permit, thoracotomy and cardiorrhaphy should be undertaken immediately. The transpleural approach through a long intercostal incision can be executed more rapidly and gives a more adequate exposure for repair of the posterior heart wound.

The presence of foreign bodies per se in the pericardium or heart should not be considered an indication for prompt surgery, the decision whether or not to operate being made on the basis of associated hemorrhage or tamponage.

Cardiac Arrest. Sudden cardiac arrest may occur under a number of circumstances, such as after blows over the precordium, during the administration of an anesthetic, following the insertion of an intratracheal cannula when the patient is in a light plane of anesthesia, and especially during manipulation of the hilum of the lung or of the heart itself. Spontaneous, unexplained cardiac arrest rarely warrants thoracotomy.

Procaine, 1 or 2 per cent, infiltration of the hilum of the lung, and the direct application of 2 per cent procaine solution to the surface of the heart may aid in preventing this catastrophe.

When faced with acute cardiac arrest, one must act promptly, since successful resuscitation cannot be achieved if the circulation is allowed to remain in standstill for more than 5 or 6 minutes. If the thorax is open, the pericardium should be opened immediately and intermittent cardiac compression begun. If the thorax is not open, a thoracotomy should be performed at once for direct cardiac compression. Delay for the purpose of applying pressure to the heart through the chest wall or diaphragm or for the injection of epinephrine or other substances is apt to result disastrously. If the heart does not respond promptly to direct compression, an intracardiac injection of epinephrine or calcium chloride should be made and intermittently continued until the heart resumes its beat. During this period oxygen should be administered and the lungs expanded periodically (15 to 20 times per minute), preferably through an intratracheal cannula.

INTERIM REPORT OF THE EXECUTIVE BOARD*

It was found necessary to schedule this brief business meeting largely because the Society's Constitution and By-laws requires that the names of applicants must be read at a business session of the Society. However, there are a few other matters on which the Board wishes to report to you briefly. Incidentally, there will be a much more complete report submitted to you on the first Wednesday in March, 1953.

Dr. Melvin A. Casberg proposed for Honorary membership: Dr. Casberg, who was proposed for Honorary membership at a recent meeting of the Board, is Chairman of the Armed Forces Medical Policy Council of the Office of the Secretary of Defense.

Dr. Casberg received his Bachelor of Arts degree in 1930 from Greenville College, Illinois, and was graduated from St. Louis University School of Medicine in 1936. An honorary LL.D. degree was conferred upon him by Westminster College, Fulton, Missouri in 1951.

During the years 1941–42 he was Surgeon in Chief of the Umri Mission Hospital, Berar, India. He entered the medical service of the United States Army in 1942. Four years later he became Chief of Surgery at Hariman Jones Clinic Hospital in Long Beach, California, and in 1948 Chief of the Medical Staff of that institution. He was Senior Attending Surgeon at the Harbor General Hospital in Los Angeles from 1947 to 1948 and in 1949 was Surgical Consultant to the Surgeon General of the Army.

From 1949 to 1952 he was Dean of the St. Louis University School of Medicine.

Dr. Casberg has been Chairman of the Armed Forces Medical Policy Council since January, 1952. He is also Chairman of the Section on Military Medicine of the American Medical Association and a member of the Board of Trustees of the National Society for Medical Research.

Dr. Casberg is a Fellow of the American College of Surgeons and a member of the American Medical Association, the St. Louis Surgical Society, and the Los Angeles Surgical Society. He is a diplomate of the American Board of Surgery.

It is with pleasure that your Board proposes that the Society recognize Dr. Casberg as a distinguished medical man and high official in our Government. The Board's proposal will be referred to the Board of Censors and will be brought back to you for a vote at the March business meeting unless a special meeting is scheduled at an earlier date.

National Society for Medical Research: In a communication addressed to the Secretary of the Society under date of August 27, 1952 Dr. A. J. Carlson, President of the National Society for Medical Research, Chicago, stated that our Society was one of the few medical societies in the United States which is not officially associated with the NSMR. "Whether or not your organization can contribute financially to the support of this Society's program," he urged, "we would like to have your active coöperation as a member society. We sincerely hope you will join with us in this program to expedite medical progress."

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* Adopted at a special business meeting of the Medical Society of the District of Columbia, November 19, 1952.

For those of you who may not be familiar with the National Society for Medical Research, it is essentially a federation of over 200 organizations concerned with medical progress. It has been in the forefront in combatting anti-vivisectionist legislation. Among the state medical societies which have recently joined up with this organization are New York, Kansas, Iowa, North Carolina, West Virginia, Colorado, the Philadelphia County Medical Association and the Hawaii Territorial Medical Association.

There are no dues; however, the Society's program is supported by contributions from its member groups in amounts ranging from $25 to $1,000.

It is your Board's recommendation that for the time being your Society limit its association with the National Society for Medical Research to coöperation and that no financial contribution be made at this time.

Malpractice situation: Recent developments with respect to group professional liability insurance coverage in the District of Columbia have been disturbing to physicians who have been aware of them.

Last year, largely due to the efforts of the Society's Committee on Medical Ethics and Deportment, the loss ratio, i.e., the percentage of claims paid and monies withheld for reserve as compared to income from premiums improved considerably. However, during the year 1952 it has been quite another matter. The United States Fidelity and Guaranty Company states that for the first 8 months of 1952 the total income from premiums on all professional liability insurance in the District of Columbia was $152,000.00, with losses and outstanding reserves amounting to $178,000.00. This undoubtedly prompted the Company to withdraw from underwriting group policies such as ours.

Notice has been given the Society that its group policy will be cancelled as of May 1, 1953, the anniversary date. Thereafter physicians will be required to purchase their policies individually and each practitioner will pay according to the cost of protecting him. The basic rate will increase materially, $50 to $65 for $5,000 to $15,000 limits.

This situation is not confined to Washington. Reports coming from various parts of the country indicate that professional liability insurance is a universally difficult problem.

Efforts are still being made by the A. H. Baker & Company, General Agents for the U. S. F. & G. in Washington, to obtain group professional liability coverage from some other company; however, reports are that the National Bureau of Casualty Underwriters is revising the rates upward and confining them to individual underwriting. What significance this has, if any, remains to be seen.

These unfavorable developments were first reported to the Society by Mr. Charles R. Barker, Jr. of the A. H. Baker & Company, who stated that all of the 150 members in the National Bureau of Casualty Underwriters were going to refuse to write group coverage. However, this has not been verified.

As previously stated, the representatives of the Society are still carrying on negotations in the hope of obtaining group coverage. Therefore, your Board is not in a position to offer any recommendations. It will submit a detailed report to you not later than the March business meeting.

Conclusion: We want to remind you that the Midwinter Seminar will be held again this year in February and because of the excellence of last year's Seminar the Board feels confident that many more will take advantage of the opportunity to participate. Attendance this year will demonstrate whether the immense amount of work which goes into the Seminar is fully justified. Be sure to examine the program and signify its value to you by your attendance.

Respectfully submitted,

JOHN MINOR, M.D., *Chairman*
WILLIAM M. BALLINGER, M.D.
WALTER FREEMAN, M.D.
HUGH H. HUSSEY, M.D.
WILLIAM ROSS MORRIS, M.D.
HERBERT P. RAMSEY, M.D.
WALLACE M. YATER, M.D.
THEODORE WIPRUD, *Secretary*

MEMBERSHIP

The following applicants for membership will be voted on at the meeting of the Executive Board, January 26, 1953.

For Active Membership

J. Frederick Barr, George Washington University—1951
Stanley W. Bergreen, St. Louis University—1947
Leo H. T. Bernstein, Utah University—1949
William W. Cardozo, Ohio University—1933
Ralph John Cole, George Washington University—1951
LeEarle B. Drake, University of Arkansas—1946
Mary S. B. Fisher, Columbia University College of Physicians and Surgeons, New York—1948
Claudine M. Gay, University of Virginia—1939
J. Robert Gladden, Meharry Medical College—1939
Harry W. Gray, University of Maryland—1946
Aston B. Greaves, Howard University—1937
Frederick C. Heath, Hahnemann Medical College—1929
Vincent Hernandez, Georgetown University—1918
Charles H. Kelley, Howard University—1929
Robert T. Kelley, Georgetown University—1945
Karl H. Kloppenstein, George Washington University—1947
Gaines K. Palmes, Johns Hopkins University—1946
Howard C. Pierpont, McGill University—1943
William B. Russell, Howard University—1936
John D. Schultz, Jr., Johns Hopkins University—1937
Harvey N. Shapiro, New York University—1948
Harry G. Thompson, Temple University—1943
Charles M. Weber, Georgetown University—1951
Harold Horatio Whitted, Howard University—1936

For Associate Membership

Stephen L. Aldrich, Northwestern University—1947
Morton D. Berkow, George Washington University—1949
Louis H. Moody, George Washington University—1940
James A. Roberts, University of Maryland—1946
Irving M. Ryckoff, Howard University—1950
Edward E. Thompson, Ohio College of Chiropody—1941

For Resident-Intern Membership

Bernard Gill McLaughlin, Georgetown University—1951
Charles Eby Townsend, George Washington University—1951

For Affiliate Membership

James P. McCarrick, Georgetown University—1945

Recent changes in membership status:

Reinstated to Active

Frederick Y. Donn, Jr.
Eugene W. Higgins
William E. Long

Active to Associate

John P. D'Angelo
Joseph W. Cooch
Robert J. Furie

Active to Resident-Intern

Francis J. Crilley
Anatol Linder

Resigned

Active

Edward J. Beattie, Jr.
Charles F. Forester
Lois D. Hubbard
Avrohm Jacobson
Warren L. Moorman
Merton T. Waite
Carl H. Wells

Associate

Raoul C. Psaki
William W. Richards

Resident-Intern

Elizabeth Mattern

Six New Life Members

Chapter II, Article IV, of the Constitution of the Society, reads as follows:

> Life members shall be active members who have been active members for a total of forty years. They shall have all of the privileges of active membership and shall be exempt from paying dues and assessments.

Our honor roll now numbers 72. The congratulations of the Society are extended to:

Seniority Number		*Date of Membership*
578	J. Lester Brooks	February 2, 1912
581	Janvier W. Lindsay	March 11, 1912
582	Oliver C. Cox	March 26, 1912
583	Roy Franklin Dunmire	March 27, 1912
584	William D. Tewksbury	March 29, 1912
590	Rush West Conklin	May 16, 1912

who have for forty years been on the roster, meeting all dues and assessments and lending their support to the Society by frequent attendance. Their status is now elevated to Life membership.

THE NATIONAL BLOOD PROGRAM*

HERBERT P. RAMSEY, M.D., F.A.C.S.

Co-chairman, Committee on Blood Banks, American Medical Association

From its modest beginnings about 35 years ago, transfusion with human whole blood has by now come to occupy a very large place in therapy. It remained, however, a method in which specific donors were recruited for specific persons until, in the late 1930's, the first blood banks came on the scene.

In 1937 the first blood bank was started at Cook County Hospital by Dr. Bernard Fantus. The first one in Washington (and the fourth in the United States) was established the same year in Gallinger Municipal Hospital by our own Dr. Charles Stanley White with the collaboration of Dr. Jacob J. Weinstein.

In this development, methods were found for storing blood for use whenever and for whomever need for it might arise.

At the beginning of World War II a few blood banks scattered about the United States were collecting and storing comparatively small amounts of blood. Sensing the value to casualties of this developing modality, the medical departments of the armed forces began researches for ways and means of getting blood and its now valuable plasma in quantity for their use. Out of this grew the Red Cross recruitment program of World War II. It took 3 years to get this program going. Its accomplishments have been detailed many times. The program ended when the War ended.

The lessons in this field which World War II taught physicians brought demands which resulted in the establishment of more and more blood banks during and after the War.

A combination of factors brought about, in 1946, consideration of a new blood program by the American National Red Cross. Some of these factors were: the recruitment know-how it had developed; the prospect of public support which it could obtain; its ready ability to mobilize large volunteer services; the possibility of further hostilities and other emergencies which might demand much blood quickly; and the fact that in many areas of the country very little or no blood was available for current civilian needs.

In 1947 approval in principle for the establishment of regional blood centers was sought and obtained from many national groups interested, including the American Medical Association. The endorsement of the AMA was predicated chiefly on the idea that hostilities would likely occur again and that the national interest required a going program of national extent which could be quickly expanded in event of war or great local catastrophe and, further, that the Red Cross was the only organization in being which could then build such a program.

In 1948 the first Red Cross regional center was established in Rochester, N. Y., with the approval and coöperation of all the hospitals and county medical societies in the surrounding 11 counties. In February, 1948 the American Medical Association established our committee, of which I have been a member from the beginning. The other Co-chairman, Dr. Leonard W. Larson, of Bismarck, North Dakota, is a pathologist well known to many of us and a member of the Board of Trustees of the AMA. The other 6 members currently come from California, New Hampshire, Louisiana, Wisconsin, Oklahoma and New York.

The general functions of this committee are to assist and to coördinate the developing blood program, to advise the Red Cross and the other cooperating voluntary blood-banks, and to be alert to the needs of the public and their physicians. The detail of our national operations has extended possibly more largely to the logistics of blood than to the scientific detail involved, although this has also engaged our attention. The office of the committee is in the AMA Washington Office, just across the street at 1523 L Street, and our Secretary is Dr. Frank Wilson. Our Administrative Assistant there is Miss Corinne Wagner.†

We have consistently encouraged the incorporation of existing blood banks into the blood program. As of now blood for defense is being collected through 46 Red Cross regional blood centers, 15 special Red

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* Delivered at the Twenty-third Annual Scientific Assembly of the Medical Society of the District of Columbia, October 1, 1952.

† Since this paper was read, the committee's name has been changed to Committee on Blood; the office has been transferred to AMA headquarters, 535 North Dearborn Street, Chicago 10, Ill.; and Dr. Paul L. Wermer has been appointed Secretary.

Cross defense collection centers, and 36 coöperating blood banks.

It became apparent early in 1951 that the reserve supplies of reprocessed plasma left over from the blood program of World War II, which was practically all that we had up to that time, were nearly exhausted. In August 1951 within the Department of Defense there was set up the "Armed Forces Blood Donor Program," which has since been made a part of the National Blood Program.

Funds were made available for publicizing our blood needs. This publicity effort is being and will be maintained until defense and civil defense reserve requirements are met.

Within the Office of Defense Mobilization, the Health Resources Advisory Committee, Dr. Howard Rusk of New York, Chairman, in late 1951 set up a subcommittee on blood with Dr. G. D. Cummings of Lansing, Michigan as chairman, and blood and plasma were declared critical. We have kept in close liaison with this group, whose function is to maintain supplies to, and balance between, defense, civil defense, and civilian needs. From the Federal standpoint they supervise the National Blood Program.

Our surveys showed that prior to Korea about 3 million pints of blood were used annually in hospitals for civilians in the United States, of which approximately 17 per cent was collected in the then existing Red Cross regional centers.

What has been accomplished since then for defense? Since December 1, 1950 (to August 22, 1952) the Red Cross and coöperating blood banks have furnished 2,985,000 pints of blood to defense purposes, some of which was sent as whole blood to Korea and the remainder processed into plasma. This has been over and above all blood processed and used for civilian needs. Barring enemy attacks or extension of our war activities it is estimated that the high level of blood procurement must be maintained throughout 1954 and possibly 1955. If fortuitous circumstances develop in that time, the end of high level blood procurement cannot now be forecast.

The American Medical Association has recommended that within each state there be set up a state committee on blood banks. There is some such set-up by now in about three-fourths of our states. Among their functions may be mentioned: the survey of the state as to the availability of blood and as to the locations and inventories of blood banks; the solution of local misunderstandings and problems; the development of interstate understandings in border service areas; the coördination of the state programs in the national picture; and the need to function under the state directors of civil defense in case of enemy attack.

In such an extensive program we naturally have encountered many problems. Due to limitations of time only a few will be mentioned.

Blood is a precious human resource. It cannot be made in factories or laboratories; it can be gotten only from human beings who voluntarily offer it. Its supply is not limitless. It has become apparent to the committee that at times blood is poured out almost like water. "There's always more in the bank." Surgeons, medical men, anesthetists and house officers in some places are profligate in its use. In the case of house officers one might almost suspect the slogan, "If you don't know what to do, give him some blood." We have a big job yet to do to teach ourselves our own responsibilities regarding the conservation of blood. It is sounder surgery to retain the patient's own blood within his vessels than to let it freely in the hope of replacing it.

We have also a big job to instruct ourselves in the use of blood fractions where they will serve as well as, or better than whole blood. This tends to extend the over-all utility of the available supply of blood. Too few of us are sufficiently informed as to the indications for plasma, irradiated or dried, resuspended red cells, packed red cells, and serum albumen.

The general failure of hospitals receiving blood from Red Cross and other centers to operate any effective program of blood replacement has seriously concerned our committee. This failure cannot relieve the staffs using blood from their direct obligation to obtain replacements from the family and friends of the patient.

The last problems I will mention are economic. The charges made for processing and administration in some hospitals are out of reason. I will quote 2 paragraphs from the last report of the American Medical Association on this subject:

"Since blood is derived from human beings only, our aim should continue to be directed at having no profit from trafficking in whole blood itself. However,

(*Continued on page 58*)

NURSING IN THE NATION'S CAPITAL

EDITH M. BEATTIE, R.N.

Executive Secretary, Graduate Nurses' Association of the District of Columbia

"Health care of the people in the United States is constantly changing as medicine makes advances in ways to prevent and cure disease. During the past ten years the changes have been particularly startling. Nursing must keep pace with these changes and thus periodically must review its methods of supplying nursing service and of preparing nursing personnel.

"Other changes in our social patterns, such as the greatly increased use of hospitals, have also contributed to the changed and increased demands for nursing service.

"The nursing profession, with other members of the health professions and other citizens of the District of Columbia, decided to make a general survey of the nursing situation in the District to determine what was needed to improve service to the community. This report contains the findings of that survey. It is hoped that the facts may help clarify some of the long-standing problems concerning the provision of adequate nursing care. With a full picture of what is available and needed, citizens and members of the health disciplines may be able to plan a continuing program of action which will result in better health services to residents of this area."

With this foreword, Margaret G. Arnstein, Chief, Division of Nursing Resources, USPHS, presents to us "Nursing in the Nation's Capital—a Survey of Needs and Resources in the District of Columbia, 1952."

The Survey was launched in February 1952 under the sponsorship of the Graduate Nurses' Association, the League of Nursing Education, and the Nurses' Examining Board of the District of Columbia, and was directed by Miss Arnstein. Its central theme was: "How to better meet the nursing needs of the people of the District of Columbia."

The main purposes were directed toward:

1. An estimate of the number of nursing personnel currently employed.

2. An estimate of the number of nursing personnel required to meet current and future needs.

3. Recommendations which will improve the quantity and quality of nursing personnel and nursing services.

As the survey progressed the original purposes were expanded to include:

1. An estimate of the number of nurses employed in the Washington offices of Federal hospitals and agencies, where they worked previously, and where they received their basic nursing education.

2. An analysis of what industrial nurses do.

3. An analysis of what services are being provided by nurses who work in high schools.

4. An evaluation of the present system of nursing education, which would attempt to answer such questions as:

(a) From what high schools or geographical areas are students in local nursing schools recruited?

(b) Are educational facilities adequate for graduate study?

(c) Are educational facilities adequate for practical nurse education?

(d) Is there a need for centralization of nursing schools and/or affiliation with the State Teachers' College?

On October 31, Miss Arnstein met with the Executive, Technical, and Advisory Committees to review the report. The Advisory Committee is composed of representatives of all fields of nursing, of allied professions, of citizens and service clubs, and representatives of industry and of the educational field.

According to her findings, we should have 855 more professional nurses to meet our needs—657 in hospitals and approximately 200 in public health services.

In regard to Schools of Nursing, the report noted that the ratio of Washington high school graduates entering Schools of Nursing in the District of Columbia is below the national average. It suggests that small enrollment in schools is uneconomical.

"In other communities," the report stated, "it has been found that a centralized nursing school can offer a comprehensive program and thus attract more students than the small school with limited facilities.

"In the District, such a program might rotate its students through several hospitals so that they have experience in both public and private hospitals as well as in the specialties."

IMPORTANT ANNOUNCEMENT

The Graduate Nurses' Association of the District of Columbia announces that, beginning January 1, 1953, its Nursing Service Bureau will not be open during the hours of 11:30 p.m. and 7:30 a.m. So few calls have been received during those hours that the cost of operation is out of all proportion to the service rendered. At 11:30 p.m. each hospital will be provided with a list of nurses available for emergency assignment.

Thirteen questions were presented in the Survey as a basis for consideration and subsequent recommendations:

1. How can work in local hospitals be made more attractive to fill budgeted positions and reduce turnover rates?

2. How can more private duty nursing care, particularly in the hospitals, be made available to more patients?

3. How may the District improve its public relations in regard to nursing?

4. What can be done to bring the hours of nursing care in the municipal hospital up to accepted minimum standards? The report pointed out that Gallinger nurses give only 2 hours a day to actual patient care, as compared to the accepted 3½ hours.

5. What level of nursing care will the District of Columbia try to provide for its mental patients?

6. What level of nursing care will the public support in tuberculosis hospitals?

7. Does the District wish to support a ratio of 1 public health nurse to 2,000 population?

8. How can the present supply of public health nurses and nurses in the public schools be better utilized?

9. Is there full utilization of the pay services of the Instructive Visiting Nurse Society?

10. How can recruiting of District residents to schools of nursing be increased?

11. Would it be feasible to centralize teaching facilities of basic nursing schools in the District?

12. How can the withdrawal rate from schools of nursing be reduced without reducing levels of achievement?

13. Do the present postgraduate educational facilities satisfy the needs and wishes of graduate nurses in the District?

At the second meeting, held on November 14, Mrs. Alliene Tilley reviewed the material in regard to the current nurse supply and needs in hospitals, and led the discussion of this phase of the report.

It was recommended that priority be given to the following:

1. Make a study of job satisfactions, attitudes, unusual positions, and turnover in personnel in an effort to determine if we are meeting the patients' needs.

2. Develop a Public Relations Program, e.g., promoting assistance for students; forming a Speakers Bureau.

3. Publish a pamphlet to be the first of a series of reports summarizing what the study group has done up to the present time.

4. Determine the standard of care to be given patients.

5. Send letters to hospital administrators asking for information regarding non-nurse functions now carried by the professional nurse and suggestions as to how such functions could be delegated to other workers.

After reviewing the highlights of the report, the Committee discussed at length the misuse of the time and skills of professional nurses, and the need for a law providing for the licensing of practical nurses. At the December meeting it was definitely recommended that we go forward with plans for promoting licensure of practical nurses and schools of nursing.

A small committee was appointed to outline plans for a special analysis of nursing—its functions, satisfactions, etc. which contribute to its effectiveness in rendering patient care. Plans will be submitted to the Graduate Nurses' Association with the recommendation that the American Nurses' Association be asked to assist with such a study.

As part of the information program another group will be responsible for preparing a series of progress reports to be widely distributed.

As Miss Arnstein reminds us, a nursing survey is but one step forward, and even that step may be ineffective unless the second step—the step of action—is taken. It is hoped that the facts provided by the Survey will form a basis for future planning and help in achieving the common goal, better nursing service for the people in the Metropolitan Area. Continued active citizen participation will further augment the full potential value of the study as well as put to constructive use any criticism which has been just in its intent.

News and Personals

The first Inter-American Session of the American College of Surgeons will convene in Sao Paulo, Brazil, February 9–12. Information on attending the Session may be obtained by writing to the American College of Surgeons, attention of Dr. H. Prather Saunders, Associate Director, 40 East Erie Street, Chicago 11, Ill. Excellent scientific meetings of wide variety will be interspersed by some unusual recreational activities.

The Eighth National Conference on Rural Health will be held at Hotel Roanoke, Roanoke, Virginia, February 27 and 28. Requests for hotel accommodations should be made directly with the Hotel Roanoke.

The first World Congress on Fertility and Sterility will be held, May 25–31, at the Henry Hudson Hotel in New York City. This Congress is sponsored by the International Fertility Association with the cooperation of the American Society for the Study of Sterility.

Twenty-three scientific sessions are planned, which will embrace the entire field of fertility and sterility. The sessions will be conducted in English, French and Spanish, with the use of earphones and simultaneous translations, as in the United Nations meetings.

Those who plan to attend should write as soon as possible to the Chairman of the Local Arrangements Committee, 1160 Fifth Avenue, New York 29, New York, for advance registration.

The Washington Medical and Surgical Society will hold its next meeting, Monday, January 26, at the Hotel 2400. Dr. Frank S. Ashburn will give the principal paper, "Significance of Cell Types in Cancer of the Lung." Discussants of his paper will be Drs. W. E. Bageant, E. R. Fenton and J. K. Cromer. Dr. Edward C. Wilson will give a case report.

At the November meeting Dr. Joseph F. Belair spoke on "What Your Patient Can Expect from X-ray Therapy." His paper was discussed by Drs. William M. Clopton and Karl C. Corley. Dr. James H. Scully gave the case report.

The Section on Gastroenterology will present its annual meeting before the Medical Society of the District of Columbia on February 11, at 8:15 p.m., in the Medical Society's building. The topic to be presented is "Medical and Surgical Aspects of Terminal Ileitis and Ulcerative Colitis"; the speakers, Dr. Burrill B. Crohn, of Mt. Sinai Hospital, New York, and Dr. L. Kraeer Ferguson, Professor of Surgery, Woman's and Graduate School, University of Pennsylvania, Philadelphia.

Preceding the meeting there will be a dinner for the speakers, members of the Section and guests at the Mayflower Hotel, 6:30 p.m. Arrangements for attending the dinner should be made with Dr. Henry A. Monat, 1016 16th Street, N.W.

The Section on Pathology and Laboratory Medicine is meeting in the homes of its members this year. The next meeting will be held on February 13 at the home of Dr. Maurice E. Selinger at 8 p.m. Dr. Oscar B. Hunter, Jr. will present a paper on "Blood Transfusion Reactions; Rh Antibodies."

Three other meetings have been held. Dr. H. H. Leffler, Secretary of the Section, entertained members of the Section, November 14; Dr. Thomas M. Peery discussed "Student Technicians' Training Program." Dr. Leffler read a paper on "Principles of Spectrophotometry" before the meeting, December 12, at the home of Dr. Frank W. Konzelman. Dr. E. Clarence Rice was both host and speaker for the meeting, January 9. His subject was "Principles of Flame Photometry."

The Washington Psychiatric Society will meet in the Medical Society's auditorium, February 18. The topic, "The Community, the Mental Hospital, and the Sex Offender," will be discussed by Dr. B. A. Cruvant, Assistant Clinical Professor of Psychiatry, Georgetown University School of Medicine, and Dr.

Francis J. Tartaglino, Clinical Professor of Psychiatry, Georgetown University School of Medicine.

Dr. Leon Salzman, Associate Clinical Professor of Psychiatry, also of Georgetown, will present a paper on "The Functional View of Sex."

The 13th Annual Essay Contest of the Mississippi Valley Medical Society is announced for 1953. The Society offers a cash prize of $100, a gold medal, and a certificate of award for the best unpublished essay on any subject of general medical interest (including medical economics and education) and practical value to the general practitioner of medicine. Contestants must be members of the AMA, residents and citizens of the United States. All contributions shall be typewritten in English in manuscript form, submitted in 5 copies, not to exceed 5,000 words, and must be received not later than May 1, 1953. Further details may be secured from Dr. Harold Swanberg, Secretary, Mississippi Valley Medical Society, 209–224 W.C.U. Building, Quincy, Illinois.

The Sixth Annual Clinical Session of the American Medical Association was held in Denver, December 2–5. At the first session of the House of Delegates in the Shirley-Savoy Hotel, December 2, Dr. Louis H. Bauer, of Hempstead, New York, President of the AMA, delivered the opening address, and Dr. Edward J. McCormick, of Toledo, Ohio, the President-elect of the Association, was introduced. Dr. John Maston Travis, of Jacksonville, Texas, was named General Practitioner of the Year. He was presented with a gold medal and a citation. Delegates present from Washington were Drs. Herbert P. Ramsey and Hugh H. Hussey. The Medical Society's President, Dr. Wallace M. Yater, and Secretary, Theodore Wiprud, also attended meetings of the House.

Among the movies shown was "Mediastinal Tumors" by Dr. Brian B. Blades, Professor of Surgery, George Washington University School of Medicine. This was the first showing of a three-dimensional color film at an AMA meeting. Dr. David N. W. Grant, of the American National Red Cross, presented an exhibit on "Red Cross Blood Program."

Color telecasts of surgery, clinical treatment and examination procedures were presented on Tuesday and throughout the week. These originated from the Denver General Hospital; the telecasts were sent out over a closed circuit and were received on specially manufactured sets installed on the lower level of Denver's Municipal Auditorium, where the scientific sessions and exhibits were held. The telecasts were sponsored by Smith, Kline and French Laboratories of Philadelphia.

In addition to the officers of the Medical Society noted above, the following members of the Medical Society attended the meetings: Major General George E. Armstrong, Drs. Pearce Bailey, Elma B. Carr, Arden Freer, Elizabeth Kittredge, Cyrus H. Maxwell, J. Winthrop Peabody, Josephine E. Renshaw, Leonard A. Scheele, Hyman D. Shapiro, Edward B. Tuohy and Frank E. Wilson.

At special ceremonies in Chicago, December 6, the new **Joint Commission on Accreditation of Hospitals** took over from the American College of Surgeons the responsibility for setting standards for the Nation's hospitals. For 35 years this responsibility had been carried by the American College of Surgeons. From now on the American College of Physicians, American Hospital Association, American Medical Association and Canadian Medical Association will share responsibilities of the program with the College of Surgeons.

Dr. Gunnar Gunderson is the first Chairman of the Commission. Dr. Edwin L. Crosby, former Director of Johns Hopkins Hospital in Baltimore, is Executive Director. Headquarters for the new Commission are at 660 North Rush Street, Chicago 11, Illinois.

Since the College began its survey of hospitals in 1917, it has spent approximately $2,000,000 from dues paid by its Fellows for the operation of a hospital inspection and approval system. Effectiveness of the program of grading hospitals can be seen from these figures: In 1918, out of 692 hospitals surveyed, only 83 (12.9 per cent) were approved; out of 4,111 hospitals surveyed by 1951, 3,352 (81.5 per cent) were approved.

The Executive Board of the Medical Society of the District of Columbia held its regular meeting on November 24.

Upon the recommendation of the Committee on Public Health, the Board approved the Diagnostic Clinic sponsored by Kiwanis Eastern Branch and established at Anacostia High School to serve students of Anacostia Senior High School and Kramer and Sousa Junior High Schools; it recommended that the services of a child psychiatrist be included in the Clinic staff at the earliest practicable date. The Board also gave its approval to undertaking the Committee's proposed Periodic Health Examination Campaign provided 350 members of the Medical Society signify their willingness to participate.

The Board favored the request of Mr. Delmer H. Wilson, Boy Scout Executive, that the fine Health Lodge at the Boy Scout Camp be named the Merrill Health Lodge in honor of Dr. Walter H. Merrill, who was an ardent Scouter and largely responsible for erecting this building. The Boy Scout Council plans to put a plaque on the building which will carry its new name. Mr. Wilson informed the Board that there is now a small plaque in the building which states that the doctors of the District of Columbia raised the money for its erection. This plaque will be retained.

At the suggestion of Dr. Fred O. Coe, Vice President of the Washington Academy of Sciences, representing the Medical Society, the Board voted to contribute $50 toward the Seventh Annual Science Fair sponsored by the Academy. The purpose of the Fair is to encourage talented young people to enter careers in science.

The Board approved the appointment of Dr. Edgar E. Quayle to the House Committee.

The resignation of Dr. Alan F. Kreglow as Chairman of the Committee on Medical Education Fund was accepted.

The newly remodeled **Eye Clinic at Walter Reed Army Medical Center's hospital component** was opened for official use, December 12. The new clinic has 27 air-conditioned rooms joined by an intercommunicating telephone system. It covers 3½ floor levels. In addition to the usual treatment and examination rooms, the clinic has a minor surgery room, one of the Army's two plastic eye sections, and the Ocular Research Unit, the Army's only group working on problems of eye injuries and disease.

Military and civilian consultants of the **Ocular Research Unit** met at the Medical Center the same day. The meeting was conducted by Colonel J. H. King, Jr., Director of the Unit and Chief of the Eye Clinic.

The Unit was formed in 1948 under the Medical Research and Development Board of the Office of the Surgeon General of the Army to conduct research projects on problems of eye injuries and diseases. In September, 1951, as a result of increased eye injuries in the Korean conflict, the research work was accelerated and a staff was assigned to Walter Reed Army Medical Center to coördinate the projects. Certain phases of the Unit's research are under way at other Army and civilian hospitals throughout the country.

The meeting included progress reports by Unit staff members, followed by discussions and suggestions by civilian consultants who came from all parts of the United States. Among those invited to attend the meeting were Dr. Alfred A. J. Den, of Episcopal Eye, Ear and Throat Hospital, and Dr. M. Noel Stow, George Washington University School of Medicine.

Members of the District Medical Society's Section on Ophthalmology were invited to visit the Ocular Research Unit, November 28 and 29, when Dr. C. L. Schepens, Chief of Retina Service at the Massachusetts Eye and Ear Infirmary, was present for research consultation in traumatic retinal detachments.

Washington physicians contributed five papers to the **Annual Meeting of the Eastern Section of the American Federation for Clinical Research,** which was held in the auditorium of Memorial Hospital, New York City, December 5. Listed on the program for the meeting were the following titles of papers and the contributors:

"Studies of Right Ventricular Function Using a Mechanical Left Ventricle," Drs. John C. Rose, Edward D. Freis, Herbert P. Broida, Charles A. Hufnagle, and John F. Gillespie

"Further Study on the Antifoaming Effect of a Methyloplysiloxane in Experimental Pulmonary Edema," Drs. William L. Howell, Joseph V. Princiotto and Charles F. Morgan

"The T-wave of the Unipolar Precordial Electrocardiogram in Normal Adult Negro Subjects," Drs. Donald H. Keller and John B. Johnson

"Clinical and Animal Studies on Terramycin Toxicity," Drs. Jeanne C. Bateman, Calvin T. Klopp and Joseph Sedwitz

"Laboratory and Clinical Studies with Erythromycin—a New Antibiotic," Drs. Monroe J. Romansky and R. E. Ritts (by invitation)

Calendar of Meetings, November 16–December 15

November 17	Obstetrical Board Committee on Medical Ethics and Deportment
November 18	Grievance Committee Committee on D. C. Survey of Medical Care of Indigents Graduate Nurses' Association
November 19	Business Meeting of Society Committee on Teaching Technics George Washington University Medical Society
November 20	Physician-Veterans of World War II Committee on D. C. Survey of Medical Care of Indigents
November 24	Executive Board Section on Anesthesiology
November 25	Committee on Medical Care Committee on D. C. Survey of Medical Care of Indigents
November 28	Committee on Interprofessional Relations
December 3	Executive Board, Woman's Auxiliary
December 4	Section on Neurology and Psychiatry Executive Committee, Gallinger Hospital
December 9	Membership Luncheon Subcommittee on Alcoholism Medical Officers' Reserve Units
December 10	Woman's Auxiliary
December 11	Program Committee Executive Committee, Health Section, United Community Services Committee on D. C. Survey of Medical Care of Indigents
December 12	Washington Psychoanalytic Society
December 15	Committee on Blood Subcommittee on Diseases of the Chest

The weekly staff meetings at **Glenn Dale Sanatorium** have been changed from Thursday to Wednesday afternoons at 1 p.m.

Dr. Clarence K. Fraser, Chairman of the Obstetrical Board, advises the Executive Offices of the Medical Society that the following changes have been made in the Board's personnel:

Dr. Coleridge Gill, of Howard University School of Medicine, replaces Dr. Thomas Simmons, who has resigned. Dr. Robert A. Dean, of Freedmen's Hospital, replaces Dr. Gill as an Associate member of the Board.

Dr. George Fusch, of Gallinger Municipal Hospital, replaces Dr. James Brew, an Associate member, who has resigned.

The George Washington University Medical Society held its second meeting, November 19, in the Medical Society's building. Dr. Jesse T. Nicholson, Professor of Orthopedic Surgery, University of Pennsylvania Postgraduate School of Medicine, was the principal speaker; his subject, "Low Back Pain." His paper was discussed by Dr. James W. Watts and Dr. Charles S. Wise.

Reservations for the Society's 27th Annual Banquet and Alumni Reunion at the Mayflower Hotel, February 21, should be made with Dr. Richard H. Fischer, 915 19th Street, N.W.

The Section on Neurology and Psychiatry met in the Medical Society's building, January 8. Dr. Milton Meltzer spoke on "Criminal Psychopaths in a Prison Setting." Discussants were Drs. Joseph Abrahams and Donald Bloch.

Two case reports were presented before the **Clinico-Pathological Society** at its meeting, December 16, at the home of Dr. William P. Herbst. Dr. John A. Washington presented the first, "A Case of Agammaglobulinemia," and Dr. Aubrey O. Hampton the other, "Acute Left Lower Quadrant Pain with Diarrhea and Hyperpyrexia in a Female Aged 43."

Dr. Bernard L. Hardin will be host to the Society, February 17.

The Women's Medical Society met, January 6, at the home of Dr. Carolyn S. Pincock. The speaker, Dr. Mary Louise Robbins, Assistant Professor of Bacteriology, George Washington University School of Medicine, discussed "New Bacteriological Tests and Their Significance, and the New Classification of Bacteria."

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New officers of the **Prince Georges County (Maryland) Medical Society** are:

Dr. John McC. Warren, Laurel, *President*; Dr. Julius Kauffman, Bladensburg, *Vice President*; Dr. Hans Wodak, Greenbelt, *Recording Secretary*; Dr. Richard Bauer, Hyattsville, *Corresponding Secretary*; and Dr. Benjamin S. Miller, Mount Rainier, *Treasurer*.

Drs. Warren, Kauffman, and Miller are Associate members of the District Medical Society.

The Louis Mackall Medical Society met for its regular monthly meeting at the Kennedy-Warren, December 18. Two papers were presented at this meeting: "Herpes of the Larynx," Dr. James J. McFarland, Jr.: "Tuberculosis of the Pleura," Dr. E. Raymond Fenton.

Dr. Emil J. C. Hildenbrand addressed the **Medical Arts Society,** January 8, on "Cardiac Arrest during Surgery." The meeting was held at the Kennedy-Warren.

Several Washington dermatologists appeared on the program of the meeting of the **Academy of Dermatology** in Chicago at the Palmer House, December 6–11. The following papers were presented: "Classification of Skin Tumors," Dr. Raymond A. Osbourn; "Radiation Protection Methods," Dr. June C. Shafer; "Dermatitis from Fabrics," Dr. Louis Schwartz; and "Pharmaceutical Therapy," Dr. Walter O. Teichmann.

The Medical Aid Committee for the Inaugural Committee 1953 met in the Medical Society's Library, December 18. Among those present to make plans for any medical emergencies during festivities in the Capital City, January 18–20, were Dr. Wallace M. Yater, Chief Medical Advisor for the Inaugural Committee, Mrs. Montgomery Blair, Chairman of the Medical Aid Committee, and the following members of the Medical Society who are serving on this committee: Surgeons General George E. Armstrong (Army), Harry G. Armstrong (Air Force), Lamont Pugh (Navy), Leonard A. Scheele (Public Health Service), Drs. George W. Calver, Frank D. Costenbader, John W. Lawlah, John H. Lyons, Herbert P. Ramsey, Josephine Renshaw, Maurice A. Selinger, Frank E. Wilson, and Mr. Theodore Wiprud.

Dr. Andrew A. Marchetti, Director and Professor of Obstetrics and Gynecology, Georgetown University School of Medicine, and **Dr. John Parks,** Professor of Obstetrics and Gynecology, George Washington University School of Medicine, contributed to a Symposium on Obstetrics at the Medical College of Virginia in Richmond, December 5. Dr. Parks gave two papers, "Bleeding in Early Pregnancy" and "Hemorrhage in Late Pregnancy." Dr. Marchetti also contributed two, "Urinary Tract Complications during Pregnancy" and "Urinary Tract Complications during the Puerperium."

Dr. Howard T. Karsner, Research Advisor to the Surgeon General of the United States Navy, was recently honored by the International Society for Geographic Pathology when he was notified that he had been elected President of the American National Committee of that Society. Dr. Karsner is internationally known in the field of pathology. He has published over 250 papers, including lectures, monographs and textbooks, and is also known for his extensive studies of the diseases of the cardiovascular system and tumors of the ductless glands.

The International Society for Geographic Pathology was established in 1931 to bring together in one meeting the manifestations of a particular disease, common in various parts of the world, and to compare them and to arrive at some conclusions concerning their cause and nature. These meetings are held at irregular intervals; the most recent, at Liege, Belgium, in 1952, the first since World War II, considered the general subject of hepatitis.

As President of the American National Committee of the Society, Dr. Karsner will preside at the Fifth International Conference, which is to be held in Washington, D. C., in September, 1954.

Dr. Arden Freer, Deputy Chief Medical Director of the Veterans Administration, resigned his position with VA, effective December 20, 1952, in order to retire to private life. Dr. Freer plans to devote his time to developing properties in North Carolina, and he expects eventually to make his permanent home in Fayetteville. At the request of Administrator Gray, and upon the recommendation of Admiral Boone, he has accepted an appointment to serve as special advisor to the Chief Medical Director on a consultatory basis.

BOSTON ME

Dr. Freer came to the VA on January 2, 1947, as Deputy Chief Medical Director under Dr. Paul R. Hawley. Previous to his appointment with VA, he served in the United States Army for 32 years, retiring with the rank of Colonel in 1947. He is an Associate member of the District Medical Society.

Succeeding Dr. Freer is Dr. Roy Wolford, who has been engaged in the medical care of veterans since his release from service following World War I, when he was commissioned as a medical officer in the Public Health Service. He served with PHS from 1920 to 1924 and with the VA and its predecessor agency from that date to the present. In 1940 he was brought into the Central Office as Assistant Medical Director for Tuberculosis. He was subsequently appointed Assistant Chief Medical Director for Professional Service.

Dr. James W. Watts, Professor of Neurological Surgery, **and Dr. Walter Freeman,** Professor of Neurology, both of George Washington University School of Medicine, were honored at the 10th National Assembly of Mexican Surgeons in Mexico City, November 10–15. They were named "Presidentes Honorarios" of the Assembly's Neurological Surgery and Psychosurgery Section because of their work in the development of lobotomy operations to relieve mental disorders.

Both physicians presented papers at this meeting: "The Future of Psychosurgery" by Dr. Freeman, and "Psychosurgery: Accomplishments, Limitations and Risks in the Management of Intractable Pain" by Dr. Watts. Dr. Watts was invited to preside at one of the sessions on November 11.

Rear Admiral Wincell McK. Craig, MC, USNR, was installed, November 19, as the new President of the **Association of Military Surgeons of the United States** during the 59th Annual Meeting of the Association at the Statler Hotel, Washington. He succeeds Major General Harry G. Armstrong, MC, USAF, Surgeon General of the Air Force.

Dr. Leonard A. Scheele, Surgeon General of the U. S. Public Health Service, is presently First Vice President of the Association and will head the Surgeons in 1954.

Admiral Craig became well known to Washington physicians when he was Chief of Surgery at the National Naval Medical Center during World War II, 1942 through 1945. Following the War he returned to civilian life as Chief of Neurosurgical Service at the Mayo Foundation, a position he still occupies. He is also national consultant in neurosurgery to the Surgeon General of the Navy.

Dr. Winfred Overholser, Superintendent of St. Elizabeths Hospital, delivered the four Isaac Ray Award Lectures, sponsored by the American Psychiatric Association, in Boston, November 13, 14, 17 and 18. The series, entitled "Psychiatry and the Law," was presented by the Harvard Law School and the Department of Legal Medicine of Harvard Medical School. The first two lectures, "The Substance of Psychiatry" and "Differences of Viewpoint," were given at the Law School; the other two, "The Mental Patient and the Hospital" and "The Psychiatrist as Witness" were delivered at the Medical School.

Dr. Overholser was selected first winner of the Isaac Ray Award for his contributions to the field of legal problems connected with mental disorders. The award was named in honor of Dr. Ray, a founder of the American Psychiatric Association.

Dr. Frank D. Costenbader returned to his Alma Mater, the University of Virginia, for its 19th Annual Clinical Session (Postgraduate Section) in Ophthalmology and Otolaryngology, November 18 21, in Charlottesville.

The first two days of the Session were devoted to ophthalmology and the last two to otolaryngology. Dr. Costenbader gave the opening scientific address, November 18, on "The Physiology of Accommodative Esotropia" and a second paper the same day on "Diagnosis and Classification of Esotropia." On November 19 he presented a third paper, "The Management of Accommodative Esotropia."

Dr. Monroe J. Romansky, Associate Professor of Medicine, George Washington University School of Medicine, was a guest lecturer at the University of Rochester School of Medicine in Rochester, New York, October 17 and 18. He spoke on "Current Trends in Antibiotic Therapy."

On November 5 Dr. Romansky took part in a Symposium on Problems in Chemotherapy and Antibiotic Therapy at Walter Reed Army Hospital. His paper was entitled, "Antagonism and Synergism in Antibiotic Therapy."

Dr. Henry P. Laughlin attended the Tenth Annual Conference of the American Group Psychotherapy Association, Inc. in New York City at the Henry Hudson Hotel, January 9 and 10. He presented a paper before the Conference on the opening day entitled, "The Group Process in Executive Development."

Dr. Harold Jeghers, Professor of Medicine, Georgetown University School of Medicine, fulfilled a number of speaking engagements during the fall and early winter months. On September 26 and 27 he addressed the Annual Meeting of the Coördinators of Cancer Teaching Program in Medical Schools in Boston, Mass.; his subject was "Problems in Developing a Medical Curriculum."

He served as Visiting Chief of Medicine *pro tem* at the Atlantic City Hospital in Atlantic City, New Jersey, during the week of October 13.

On December 3 Dr. Jeghers was one of the lecturers for a graduate course given at St. Michael's Hospital in Newark, New Jersey. He discussed "Clinical Syndromes Produced by Congestive Heart Failure." The following day he gave a clinic on "Trichinosis" at Boston City Hospital, Boston, and addressed the House Officers' Association of the Massachusetts Memorial Hospitals in Boston on the subject, "Oral Lesions Indicative of Systemic Disease."

Dr. C. Herbert Marshall, Jr. was elected President of the Federation of Civic Associations, November 21. Dr. Marshall is Past President of the National Medical Association, the Medico-Chirurgical Society of the District of Columbia, Inc. and of the Washington Branch of the National Association for the Advancement of Colored People. He was President of the Rock Creek Citizens' Association for 17 years. Dr. Marshall is a graduate of Dartmouth College and Howard University School of Medicine.

Dr. Joseph L. Gilbert and Dr. Philip A. E. Stebbing were among employees of Gallinger Municipal Hospital who were honored in a special observance, November 20, for having given more than 20 years' service to the Hospital. Dr. Stebbing has been Superintendent of the Hospital since 1949. Dr. Gilbert is Chief Psychiatrist and Alienist of the District of Columbia and Director of the Hospital's Mental Hygiene Clinic. Dr. Daniel L. Seckinger, District Director of Public Health, was among those who addressed the honorees.

Theodore Wiprud, Secretary of the District Medical Society, was invited to address the Conference of Examining Physicians of the Chesapeake and Potomac Telephone Companies at the Shoreham Hotel, November 20. Mr. Wiprud spoke on the subject, "Doctors Seek Good Will."

Colonel J. F. Siler, former Commandant of the Army Medical School, has been reëlected President of the Board of Directors of the **Gorgas Memorial Institute of Tropical and Preventive Medicine. Dr. Walter A. Bloedorn,** Dean of George Washington University School of Medicine, was reëlected Secretary of the Board.

Dr. R. Lomax Wells, Medical Director of the Chesapeake and Potomac Telephone Companies, was invited to address a medical conference for the physicians of the Hercules Powder Company at Sea Island, Georgia, on December 5. Dr. Wells spoke on "Absenteeism."

Dr. Howard T. Karsner has been reappointed a member of the Scientific Advisory Board of Consultants to the Armed Forces Institute of Pathology, to serve for five years. Dr. Karsner is an Associate member of the District Medical Society.

Dr. Irving B. Brick, Assistant Professor of Medicine, Georgetown University School of Medicine, delivered a paper entitled, "Residuals of Yellow Fever Vaccine Hepatitis after Ten Years—Medical and Legal Problems" in Chicago before the Association for the Study of Liver Diseases.

Dr. Charles E. Rath, Assistant Professor of Medicine, Georgetown University School of Medicine, was elected a Fellow of the International Society of Hematology at its recent meeting in September, 1952 at Mar del Plata, Argentina. Dr. Rath is Director of the Hematology Laboratory and Blood Bank at Georgetown University Hospital.

Dr. Raymond J. Winfield was separated from service early in December, having served as Chief of Surgery of the 171st Evacuation Hospital in Korea for 14 months. He served in the Army Medical Corps during World War II and was recalled to active duty in January, 1951 shortly after the 382nd General Hospital Unit was reactivated.

Dr. Winfield has resumed the practice of general surgery at 127 Madison Street, N.W., in the offices of the late Dr. Stewart M. Grayson.

Dr. James D. Brew, Jr., was recalled to active duty with the U. S. Navy and reported for duty at the Naval Hospital in Bremerton, Washington, November 20.

Dr. James E. Fitzgerald, Resident at Georgetown University Hospital, a Resident-Intern member of the Medical Society, has also been recalled to active duty in the Navy.

BOOKS RECEIVED

Acknowledgment is made of the following books which have recently been received. Selections will be made for more extensive review in the interests of our readers and as space permits. Physicians are urged to submit reviews of additional current books which, in their opinion, merit comment.

Standard Values in Blood, being the first fascicle of a Handbook of Biological Data. Edited by Errett C. Albritton, A.B., M.D., Fry Professor of Physiology, The George Washington University. Prepared under the Direction of the Committee on the Handbook of Biological Data, American Institute of Biological Sciences, The National Research Council. Price, $4.50. Pp. 199. Philadelphia: Saunders, 1952.

Synopsis of Pathology, 3rd ed. W. A. D. Anderson, M.A., M.D., F.A.C.P., Professor of Pathology, Marquette University School of Medicine; Pathologist, St. Joseph's Hospital, Milwaukee, Wisconsin. Price, $8.00. Pp. 788, with 334 text illustrations and 13 color plates. St. Louis: Mosby, 1952.

Bacterial and Mycotic Infections of Man, 2nd ed. Edited by René J. Dubos, Ph.D., The Rockefeller Institute for Medical Research. Pp. 886, with 98 illustrations. Philadelphia: Lippincott, 1952.

Diseases of Metabolism; Detailed Methods of Diagnosis and Treatment, 3rd ed. Edited by Garfield G. Duncan, M.D., Director of Medical Division, Pennsylvania Hospital; Clinical Professor of Medicine, Jefferson Medical College, Philadelphia, Penna.; with 20 contributors. Price, $15.00. Pp. 1179, illustrated. Philadelphia: Saunders, 1952.

Ophthalmic Pathology; An Atlas and Textbook. Jonas S. Friedenwald, Helenor Campbell Wilder, A. Edward Maumenee, T. E. Sanders, John E. L. Keyes, Michael J. Hogan, W. C. and Ella U. Owens, with the editorial assistance of Helen Knight Steward. Published under the joint sponsorship of The American Academy of Ophthalmology and Otolaryngology and the Armed Forces Institute of Pathology. Price, $18.00. Pp. 489, with 1,160 plates. Philadelphia: Saunders, 1952.

Electrocardiography in Practice, 3rd ed. Ashton Graybiel, M.D., Captain, Medical Corps, United States Navy; Director of Research, United States Naval School of Aviation Medicine, Pensacola, Florida; Paul D. White, M.D., Executive Director, National Advisory Heart Council; Consultant in Medicine, Massachusetts General Hospital; Louise Wheeler, A.M., Executive Secretary, the Cardiac Laboratory, Massachusetts General Hospital; and Conger Williams, M.D., Instructor in Medicine, Harvard Medical School; Associate Physician, Massachusetts General Hospital. Price, $10.00. Pp. 378, with 294 figures. Philadelphia: Saunders, 1952.

Practical Dermatology for Medical Students and General Practitioners. George M. Lewis, M.D., F.A.C.P., Professor of Clinical Medicine (Dermatology), Cornell University Medical College; Attending Dermatologist, The New York Hospital; Secretary, the American Board of Dermatology and Syphilology. Price, $7.50. Pp. 328, with 99 figures. Philadelphia: Saunders, 1952.

Nutrition and Diet in Health and Disease, 6th ed. James S. McLester, M.D., Professor of Medicine Emeritus, University of Alabama; and William J. Darby, M.D., Ph.D., Professor of Biochemistry and Director of the Division of Nutrition, Vanderbilt University. Price, $10.00. Pp. 710, with 14 figures and 145 tables. Philadelphia: Saunders, 1952.

Viral and Rickettsial Infections of Man, 2nd ed. Edited by Thomas M. Rivers, M.D., Director of the Hospital, The Rockefeller Institute for Medical Research. Pp. 736, with 90 illustrations including 7 plates in color. Philadelphia: Lippincott, 1952.

Brain Surgeon, The Autobiography of William Sharpe. William Sharpe, M.D. Price, $3.75. Pp. 271. New York: Viking, 1952.

BOOK REVIEWS

Synopsis of Pathology, 3rd ed. W. A. D. ANDERSON, M.A., M.D., F.A.C.P., Professor of Pathology, Marquette University School of Medicine; Pathologist, St. Joseph's Hospital, Milwaukee, Wisconsin. Price, $8.00. Pp. 788, with 334 text illustrations and 13 color plates. St. Louis: Mosby, 1952.

This popular synopsis of pathology, first published 10 years ago, is now seen in its third edition. The original objective has been retained, that of distilling from the detailed complexity of modern pathology a concise but comprehensive survey that will serve as a useful review for the student and practitioner alike. It thus has a different purpose and is not intended to substitute for the larger textbooks.

The new edition incorporates many recent advances in knowledge in a thorough revision of each chapter, reminding us, as the author notes in his preface, how far from static is the science of pathology.

The references that follow each chapter lean toward review articles, thus providing a valuable complement to the condensed text.

This compact volume serves its purpose well and can be recommended as an authoritative and useful work.

JOHN T. ALEXANDER, M.D.

Electrocardiograpy in Practice, 3rd ed. ASHTON GRAYBIEL, M.D., Captain, Medical Corps, United States Navy; Director of Research, United States Naval School of Aviation Medicine, Pensacola, Florida; PAUL D. WHITE, M. D., Executive Director, National Advisory Heart Council; Consultant in Medicine, Massachusetts General Hospital; LOUISE WHEELER, A.M., Executive Secretary, the Cardiac Laboratory, Massachusetts General Hospital; AND CONGER WILLIAMS, M.D., Instructor in Medicine, Harvard Medical School; Associate Physician, Massachusetts General Hospital. Price $10.00. Pp. 378, with 294 figures. Philadelphia: Saunders, 1952.

A new (third) edition of this atlas of Electrocardiography has long been awaited. The 6 years that have elapsed since the publication of the second edition has seen the general adoption of the augmented unipolar extremity leads and the precordial V leads as part of the routine EKG.

In revision the book has been completely rewritten and reillustrated, with over 290 new examples of normal and abnormal tracings. While the general plan of presentation remains as before, the new edition emerges as virtually a new book illustrating recent advances in clinical electrocardiography. The format has been changed to great advantage. The paper, printing and quality of the reproductions are much improved.

The first chapter presents a new and informative feature, a comprehensive though concise historical account tracing the development of the concepts of electrocardiography from the early nineteenth century to the present decade.

Five short chapters are devoted to a thorough illustration and discussion of the normal electrocardiogram and all its variations. The section on Disorders of Rhythm and Conduction is excellent. Each example of the arrythmias is fully portrayed in multiple leads.

The longest section contains representative tracings obtained in the different etiologic types of heart disease and their subdivisions.

The final section presents 37 "unknowns" for the reader's practice in interpretation, each with a case history.

This is, in short, a fine book that can be recommended to the practioner of medicine without reservation.

JOHN T. ALEXANDER, M.D.

The Treatment of Injuries to the Nervous System. DONALD MUNRO, M.D., F.A.C.S., Surgeon-in-chief, Department of Neurosurgery, The Boston City Hospital; Associate Professor of Neurosurgery, Boston University School of Medicine; Assistant Professor of Neurosurgery, Harvard University Medical School. Price, $7.50. Pp. 284, with 47 figures. Philadelphia: Saunders, 1952.

This is an excellent book. As Dr. Munro states in the preface, the book is written primarily for the use of the general surgeon and practitioner, and in my opinion Dr. Munro has admirably accomplished his aim of putting across his ideas on the management of these cases in clear and understandable language.

The book is well organized, proceeding in an orderly fashion from causes to methods of transportation, the care of open wounds, the problem of the care of bowels, the use of restraints and drugs, etc. Injuries in general are divided into two groups, the operable group and the nonoperable group. An important chapter, not often seen in this type of presentation, is a discussion equally competent and detailed of cranio-cerebral injuries in the newborn.

In his remarks upon the long-time care of the spinal cord injury cases a great deal of valuable information is presented on the care of the genitourinary tract and bowel and sexual functions. As evidence of the meticulous devotion of the author to his subject is the section on how to turn such a patient in bed, illustrated by excellent photographs. All too often authors of similar books assume unjustifiably that their reader or the nurses know all about the management of such problems as actual bed care, the care of the skin and bowels, etc. An excellent chapter is presented in the treatment of injuries to the peripheral nervous system, including the primary injuries as well as those injuries associated with fractures of the long bones.

There is a short chapter on the effect of spinal anesthesia on the central nervous system which, while containing excellent information, somewhat puzzles me as to why it should have been included in this particular treatise.

One chapter is devoted to a detailed discussion of emergency operations and other surgical measures, describing the general types of procedures employed and also listing the necessary instruments for the performance of these operations. It is in this chapter that Dr. Munro makes a very excellent point, that it takes no longer to move the patient to the neurosurgeon than it does to move the neurosurgeon to the patient, and he further amplifies this by urging that all such cases, where it is at all possible, should be transferred to a neurosurgical center where the facilities and skills of those specially trained in this type of work can reap the greatest benefit for the patient.

Chapter VIII in this book is a very remarkable chapter. It was written by the Assistant Vice President of the Liberty Mutual Insurance Company and in it he presents clear evidence of the savings effected by rehabilitation of the paraplegic patient. The sum of money involved in indemnifying patients who have been rendered paraplegic is simply staggering and, by way of illustration, he shows that by rehabilitating 14 paralyzed patients the savings amounted to in excess of $900,000! This certainly is an eye-opener.

It is particularly pleasant to read a book wherein the author has disdained to use the incomprehensible chemical names for common drugs under the guise of being more scientific and Dr. Munro has wisely chosen the more familiar names such as Dilantin, Gelfoam, Oxycel, etc.

There can be no question but what Dr. Munro has performed an outstanding service in gathering together, in one single book, all this information and presenting it in as readable and logical a manner as he has done. This book can be unqualifiedly recommended to all practitioners dealing at any time with injuries to the nervous system and should be required reading for every surgical resident.

J. M. W.

EDWARD WARREN BURCH, M.D.
(1872–1952)

AT.

Dr. Edward W. Burch, a Life member of the Medical Society of the District of Columbia, died, December 9, 1952, at Sibley Memorial Hospital, following a short illness. He lived at 3833 Cathedral Avenue, N.W. He had been engaged in the practice of medicine until his recent illness, a period of 47 years.

Dr. Burch was born at Charlotte Hall, Maryland, September 19, 1872, the son of Ferdinand E. and Symphronia Guy Burch. He received his early education in the public schools of Charlotte Hall and at the Charlotte Hall Military Academy. He graduated from George Washington University School of Medicine in 1905, and began practicing in the District of Columbia the same year. He was on the staffs of Sibley and Casualty Hospitals.

Dr. Burch became a member of the Medical Association of the District of Columbia in 1906 and a Life member of the Medical Society in 1947. He was a member of the American Medical Association. He also held membership in the University Club, the Association of Oldest Inhabitants, and the Holy Name Society of the Church of the Annunciation.

Surviving are his wife, Mrs. Effie M. Burch; a son, Dr. Warren B. Burch, who shared offices with him at 208 Maryland Avenue, N.E., also a member of the District Medical Society; and three daughters, Mrs. Irma L. Quaid, Mrs. Dorothy F. King and Miss Helen R. Burch, all of Washington.

AMELIA FRANCES FOYE, M.D.
(1871–1952)

Dr. Amelia Frances Foye died at her home, 1807 R Street, N.W., November 10, 1952, following a stroke, November 5.

One of eight children of Edward and Rose Foye, Amelia Frances Foye was born, August 15, 1871, in Honeoye, Ontario County, New York.

Washingtonians' love for Dr. Foye began when this unusually charming and lovely woman came to Washington to visit as a happy, pretty young girl. She first attended Sidwell Friends School. Few medical schools were open to women in those years, so in 1894 this young woman entered Howard University, from which she was graduated in 1898. The District of Columbia Board of Medical Examiners had been established in 1896, so Dr. Foye took the examination (which lasted 4 days of 12 hours each) and became the 56th doctor to be certified as eligible to practice by that Board. One of the older physicians told me, "We men failed, but that girl was so enchanting as well as beautiful that we were never jealous. All we older boys loved her, and saw to it that she was elected a Vice President of the Medical Society of the District of Columbia, as well as allowed hospital privileges. We were always glad to see her and wondered how such a beautiful head could contain such intelligence."

Dr. Foye "hung her shingle" on her front door in 1898 and began her 54 years of practice. She was always proud to be known as an old-fashioned "family doctor" who had her office in her home so that her patients could always find her. Her practice grew rapidly, and when a crisis arose in many Washington families, they anxiously awaited the arrival of their family physician, Dr. Foye. Dr. Foye was at one time physician to the family of a president of the United States (Hoover).

AMELIA FRANCES FOYE, M.D.

Means of transportation changed during the long years. She began her practice by making home calls on foot, then on a bicycle, later street cars, and how excited she was when she purchased her first electric car, which was followed by a Model T Ford. But most of us remember her as an excellent, fast, modern driver.

Dr. Foye was on the courtesy staffs of Garfield and Sibley Memorial Hospitals for many years.

She was a Life member of the Medical Society of the District of Columbia, her membership dating back to 1900. She was a charter member of the Women's Medical Society of the District of Columbia, and a member of the American Medical Association and the American Medical Women's Association. She was a Past President of the Women's City Club.

She lived a happy life, sharing her home with a friend of 52 years, Miss Margaret Ann Patch. The two women were unusually congenial and their friends spent many pleasant evenings in their home.

Dr. Foye is survived by a sister, Mrs. Rose Foye Andrews, of 3603 New Hampshire Avenue, N.W., and by many nephews and nieces.

MARGARET M. NICHOLSON, M.D.

WILLIAM JOSEPH STANTON, M.D.
(1888–1952)

Dr. William J. Stanton, District physician for 37 years until his retirement in 1948, died unexpectedly, November 29, en route to Georgetown Hospital. He lived at 8613 Piney Branch Road, Silver Spring, Maryland.

Dr. Stanton was born, September 3, 1888, in Barrington Center, Rhode Island, the son of James Joseph and Catherine Murphy Stanton, and received his early education in the public schools of that city. He was 16 years old when he came to Washington. He graduated from Georgetown Preparatory School in 1907 and from Georgetown University School of Medicine in 1911. He interned at Georgetown Hospital.

CAT.

Although a general practitioner during most of his long career, which began in 1912, Dr. Stanton was once attached to the staff of Georgetown Hospital. He taught obstetrics at Georgetown Medical School from 1914 to 1932. He had courtesy privileges at all the hospitals in the District.

Dr. Stanton was Past President of the Washington Gynecological Society and the Georgetown Clinical Society. He was an Active member of the District Medical Society from 1913 to 1950, and a member of the Washington Clinical Club. He was affiliated with the Knights of Columbus and was a member of the University Club and the Columbia Country Club.

Survivors are his wife, Mrs. Bernice S. Stanton; two sons, Major William J. Stanton, Jr., USAF, stationed at Fort Slocum, New York, and Dr. James

S. Stanton, a member of the District Medical Society; and a daughter, Mrs. John B. Brady, of Silver Spring, Md.

Science in Medicine—Bush

(*Continued from page 6*)

progress than that we should be bogged down to a snail's pace. Our problems of integration and interchange are solvable if we will devote enough of our energy to grappling with them.

It has been a great pleasure for me to be with you this evening and to be permitted to talk about your affairs. For I find it stimulating to associate with members of a profession so wholeheartedly dedicated to the welfare of mankind. These are invigorating days in science and its applications. And if we can only avoid the disaster of another world war, I am convinced that we are on the threshold of great things, full of hope for a better future and a more healthy, happy race of men.

Anticoagulant Therapy for Myocardial Infarction—Russek

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Radioiodine—Werner

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Vaginitis—Bieren

(*Continued from page 22*)

can influence the diagnosis and treatment.

In many women, complaints of dyspareunia and vaginal irritation are symptoms of an underlying personality disturbance rather than of a primary vaginal infection.

When symptoms persist after an adequate course of treatment has been prescribed, the wrong diagnosis has been made, an unrecognized complication of therapy has occurred, or the patient has failed to use the treatment.

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National Blood Program—Ramsey

(*Continued from page 44*)

all services rendered cost something and are paid for by or on behalf of every recipient of such services. In the case of the Red Cross operation, capital costs, depreciation of equipment, cost of supplies, and numerous personal services, technical and otherwise, amount to about $5 per pint. It should be made clear that everyone for whom a unit of blood is delivered to a hospital receives not only the blood but also, in effect, a contribution of at least $5 furnished by the subscribers to the American Red Cross campaigns. It is doubtful whether in the long run it would be wise to continue this contribution to persons not otherwise entitled to public support.

"The committee has observed the wide variation in service charges in hospitals and blood banks. Local conditions will always cause some variation, but the extremes now observed seem inexplicable. The service charge should cover all costs of the operation including depreciation and expansion reserves, but the realization of profit for the support of other institutional needs should be discouraged."

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SOME DANGERS OF ANTIBIOTIC THERAPY*

JOHN A. WASHINGTON, M.D.

Assistant Clinical Professor of Pediatrics, George Washington University School of Medicine

TO MY mind as a pediatrician the most outstanding danger which we practitioners face in using our readily available antibiotics lies in the fact that we easily deceive ourselves into believing that we are curing acute infections which actually are self-limited and against which all antibiotics are equally ineffectual. If the natural course of such a disease is 1 or 2 days we congratulate ourselves that our treatment has "nipped the thing in the bud." If the natural course is longer than 2 days we conclude that the antibiotic which we have chosen is the wrong one and switch to another. Like grandmothers with onion poultices we credit our success to the medicine in use at the moment the temperature drops.

The justification for our thinking lies in the fact that in many cases it undoubtedly is correct. In treating everyday acute infections at home we must rely on our clinical acumen to decide if antibiotics are to be used. Often there is no way to be sure whether an inflamed throat is due to a hemolytic streptococcus or to a virus which may turn out to be that of measles or even a common cold. And who hasn't seen a scarlet fever rash associated with a most innocent-appearing pharyngitis, or acute nephritis follow a mild, almost unnoticed illness? The naked truth is that the keenest clinical acumen is not always adequate to tell us what we are dealing with, especially at the onset.

The danger which I am pointing out is not that it is so wrong to use antibiotics for upper respiratory infections, which intensive laboratory procedures or the passage of time may prove to be due to a virus that must run its course; the danger lies in the tendency to assume that all temperature drops in the 24 hours following an injection of penicillin are due to the penicillin. This assumption sets up a vicious cycle; the more we use antibiotics the less easy we feel in not using them; before we know it we have stopped making the effort to separate out the entities which do not need them. Everything or almost everything clears up during the administration of antibiotics. Why should anyone make the effort to avoid their use?

Dr. Romansky has given us most important information about the toxic and allergic reactions. The infrequency of these and the availability of several alternative antibiotics in case of suspected sensitivity to one results in the general attitude that the attacking microörganism constitutes a far greater hazard than the drug. It is obvious, however, that if the drug has no effect on the attacking microörganism, by introducing the drug the total risk of harm to the patient has been appreciably increased.

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* Presented as part of a symposium on this subject which was sponsored by the Section on Pediatrics, September 30, 1952, during the Twenty-third Annual Scientific Assembly of the Medical Society of the District of Columbia.

Another objection is the economic one. The fact that parents generally do not count the cost of treating a sick child places on us the responsibility of not straining a limited family budget unnecessarily with the sort of drug bills commonly faced by the breadwinner after an illness. If there are several children, the cost of treating an upper respiratory epidemic in the home can be staggering.

Still another not inconsiderable strain often imposed by a course of antibiotic therapy is that borne by the mother when she is instructed to awaken herself and the child at regular intervals and coax or force a dose of medicine into him. Fortunately, the necessity for frequent dosing even of penicillin seems to be disproven. Keefer suggests the use of oral doses of 200,000 units of penicillin 3 times a day for adults with streptococcal respiratory infections.

When medication by mouth is not possible, another ill-effect appears in the development by the child of such fear of the needle-wielding doctor that subsequent contacts are disagreeably noisy and adequate examination difficult. Should such a child at a later date develop a critical disease, such as appendicitis, this sort of patient-doctor relationship is a serious obstacle to making a diagnosis.

Finally, there is the already mentioned fact that in making use of these drugs we tend to deceive ourselves into thinking that we are responsible for recoveries, many of which would have occurred more happily without us. A concept of therapy which includes such unsound assumptions is bound in the long run to lessen our skill in treating disease. We seem to ignore the fact that the human race survived remarkably well prior to 1937 and that hospital record rooms of former years are full of charts showing 24- and 48-hour recoveries due to those almost forgotten agents, the natural antibodies. We automatically accept the fact that these antibodies are responsible for terminating certain clearly labeled entities such as measles and chickenpox and ignore the probability that the case of flu in the next house must recover by the same mechanism.

Our deception of ourselves is shared by many of our patients. The idea that antibiotics cure everything is firmly fixed in many parents' minds to a point where they are dissatisfied if such drugs are omitted. There are unhappy skeptics among them, however. It has been my experience that parents appreciate being told the truth, that we cannot always be sure what we are dealing with and that the drug which we are prescribing may contribute nothing toward recovery.

Regarding this matter of making the effort to avoid the unnecessary use of antibiotics, it can be said that 3 questions are likely to worry us. First, can we be reasonably sure that we are dealing with an entity which will not be combated by an antibiotic? Second, if we are sure of this, are we certain that there is not present a complicating secondary invader which would be effectively controlled? Third, would possible complications be so dangerous as to justify using an antibiotic prophylactically?

With regard to the first consideration it has been mentioned already that it is impossible frequently to tell whether or not a primary infection of the upper respiratory tract is one which can be combated. When in doubt a practitioner faced with a sick child is not in a position to delay starting antibiotic therapy. However, there are entities which are recognizable as being untreatable. Some like measles show classical signs; others become recognizable as they invade a community in epidemic waves. The physician gets the "feel" of the new enemy as he deals with it. Worthy of mention is the recently clarified summertime virus disease, herpangina. Here an angry-appearing pharyngitis is identifiable because small ulcers appear on the anterior pillars and soft palate. Like the common cold, its duration is the same whether it is treated or not. Unlike the common cold, it does not spread upward to produce coryza, so that bacterial complications in ears and sinuses do not occur. Because the natural course of the febrile stage of herpangina is 24 to 48 hours, it is the type of disease which 1 or 2 "shots" of penicillin seem to cure. Thus a physician at the start of an epidemic is deceived into believing that antibiotics are useful. If he has not heard Dr. Huebner at the National Institutes of Health or our Dr. Parrott at Children's Hospital describe the entity, he may go through an entire summer prescribing drugs unnecessarily. Or, as the epidemic wears on, he may sense the truth by an accident, such as being called to see a child so late in the child's illness that spontaneous recovery has occurred.

Now, regarding the omitting of antibiotics in the febrile upper respiratory infections which involve the lining membrane of the nose and trachea with associated coryza and coughing (the sort of entities which we call "flu" and for which we assume a virus etiology), it can be said that except in so-called virus pneumonia there is no evidence that antibiotics combat respiratory viruses. The tremendous value of antibiotics in treating complications and, at times, in avoiding complications needs no comment. The routine use of antibiotics prophylactically seems unjustified, and, in my experience, involves an uncomfortably long period of dosing, because the coryza and cough often last a week or 10 days. Unless the antibiotic is continued until the coryza subsides, the onset of otitis media or sinusitis may require a second administration in addition to the original prophylactic dose. It would appear that in the case of the exudative respiratory infections one may feel obliged to use antibiotics "at the drop of a hat," but he can wait for "the hat to drop." One other entity comes to mind which usually is well defined and which can happily be allowed to run its course. This is the epidemic vomiting and diarrhea which we call "intestinal flu" or virus X.

In closing, I will mention the reply made to me recently by an eminent brain surgeon. I had expressed some sympathy for him in choosing a specialty which involves the sort of strain and uncertainty that result in the kind of operating-room tantrums indulged in by brain surgeons of a generation ago. "Modern brain surgery," he said, "is a more exact science than pediatrics and my sympathies go to a pediatrician faced with sudden fever in a baby. He is forced to balance possibilities and probabilities, often with much less definite signs to guide him than those presented in neurosurgical problems."

A CRITICAL EVALUATION OF BIOLOGICAL AND CHEMICAL TESTS FOR THE DIAGNOSIS OF PREGNANCY[*]

RICHARD H. FISCHER, M.D.

Department of Obstetrics and Gynecology, Research Foundation, Doctors Hospital, Washington

THE difficulties sometimes occasioned by the attempt to diagnose pregnancy in its early stages never fail to come as a surprise. Although it is expected that clinical alterations are minimal in the first weeks, few seem aware that the laboratory is faced with exactly the same inadequacy of physiologic change. Any single alteration associated with early pregnancy may be duplicated in a number of other clinical entities, but it is not likely that the total pattern of change is ever simulated by pathologic-physiologic change. It is, therefore, extremely difficult for the measurement of any single phenomenon to eliminate the false-negative and false-positive results sometimes obtained.

The earliest recognizable changes in the maternal organism following conception are hormonal in nature. The vast majority of pregnancy tests have utilized these hormonal changes as the basis for diagnosis. Our knowledge to date indicates that the following endocrine alterations occur shortly after the implantation of the fertilized ovum:

1. The trophoblastic elements begin immediately to secrete gradually increasing quantities of gonadotropic hormone. This hormone reaches its peak excretion value at the time of the second missed menstrual period and then decreases.
2. The corpus luteum, instead of regressing, continues to develop and elaborate progesterone under the stimulation of the gonadotropic hormone. This function continues until approximately the eleventh to the thirteenth week of pregnancy, after which progesterone production is assumed by the placenta.
3. Estrogens continue to be present at levels corresponding to the normal peak reached during the proliferative phase of the menstrual cycle. The postovulatory drop does not occur. During recent years, data have accumulated indicating increased activity on the part of the thyroid and adrenal, and it seems likely that there is a general speed-up of the entire endocrine system.

In selecting any of the above-mentioned changes for use in pregnancy testing, we must obviously choose the one showing the greatest change from the normal situation, the one least likely to be encountered in conditions other than pregnancy, and the one best demonstrated by routine laboratory means. As of this date, the chorionic gonadotropins best fulfill the first two criteria and do not present any insurmountable objection in so far as laboratory demonstration is concerned.

BIOLOGIC PROCEDURES

The commonly employed biologic procedures for the diagnosis of pregnancy are based upon the increased excretion of gonadotropins in the urine of pregnant women. The injection of such urine into a rather wide variety of laboratory animals results in readily demonstrable signs of genital tract stimulation. Whether the immature mouse, rat, or mature doe rabbit is employed, the ovaries and uteri reveal their characteristic changes—hyperemia, hemorrhagic follicles, and corpora lutea. Let us look at the results obtained with the standard Aschheim-Zondek test which has been selected as representative of this particular group of tests (table 1). In a recent survey conducted in our own laboratory, an over-all accuracy of 92.8 per cent was obtained. It is assumed that these patients represented a diagnostic problem to the physician, and the findings and history were unknown to us at the time the tests were performed. Two months after the results of the test were reported, the referring physician was contacted and the results determined. This figure, therefore, represents the ability of the Aschheim-Zondek test to diagnose pregnancy and not merely its ability to confirm it. Similar accuracy figures have been reported for the Friedman modification test as well as for the various 6-, 12-, and 24-hour procedures which employ the immature white rat.

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[*] Delivered at the Twenty-third Annual Scientific Assembly of the Medical Society of the District of Columbia, October 1, 1952.

TABLE 1

Standard Aschheim-Zondek Procedure for Diagnosis of Pregnancy

	NUMBER OF CASES	PER CENT CORRECT	PER CENT INCORRECT	TOTAL ACCURACY, PER CENT
Positive	226	93.4	6.6	
Negative	98	91.35	8.5	
Total	324	92.8	7.2	92.8

The main source of the false-negative results reported here is the result of low gonadotropic titers present at the time the test was performed. Since levels rise toward their peak gradually, performance of the test immediately following the first missed menstrual period may give rise to such errors. It is usually necessary to allow 2 weeks to elapse before full reliance can be placed in a negative report.

The false-positive results are derived primarily from those women in the premenopausal group who are experiencing amenorrhea. Very frequently this type of amenorrhea is associated with a rise in gonadotropic excretion, the hormones being derived from the patient's pituitary. In addition, women in younger age groups with amenorrhea due to primary ovarian failure may exhibit a similar condition. It is a relatively simple matter, however, to distinguish these people in the laboratory. In such cases, the demonstration of the absence of pregnanediol in the urine serves to indicate that pregnancy is not present in spite of the elevated titer of gonadotropins.

A second group of biologic procedures utilize various amphibia to demonstrate the presence of the increased gonadotropic excretion. The female African toad, *Xenopus laevis*, has been employed extensively by our neighbors in the Southern Hemisphere where this creature is readily available. The African toad is peculiar in that it carries within its body a large supply of ova at all times. The female may be stimulated to release these eggs by mating or by the injection of gonadotropins. A positive response, therefore, consists in the extrusion of many ova within 6 to 8 hours; the ova are readily visible in the container. A high degree of accuracy has been reported from many sources, but the high cost of the animal and the amount of care essential to its welfare have served to minimize its popularity in this country.

The male frog of the species *Rana pipiens* has more recently been pressed into service for pregnancy diagnosis. It possesses the advantages of easy accessibility, rapid results, minimum requirements for care, and the lack of need for skilled personnel and special equipment. Urine is injected into the dorsal lymph sac, and a catheterized specimen of the frog's urine is examined microscopically at 1 and 2 hours following injection. The detection of the typical spermatozoa in the urine is considered a positive response. In a study similar to that carried out with the Aschheim-Zondek test, 152 unknown urines were examined and the results checked after an interval of 2 months (table 2). The total accuracy figure of 92.7 per cent compares favorably with that obtained with the Aschheim-Zondek test. Attention must be called, however, to the unusually high percentage of false-negative results. It would appear that the frog is slightly less sensitive to gonadotropins than the mouse. This impression has been confirmed by injecting serial dilutions of known-positive urine into frogs and mice. It has been consistently found that the frog becomes negative at a lesser dilution than that required to reverse the mouse response. This lack of sensitivity in the frog becomes more marked during the summer months, a phenomenon reported by many other investigators.[1, 2] As the mechanism for the release of spermatozoa in the frog is not yet clear, no explanation for the seasonal variation is forthcoming. In contrast to the false-negative results reported, a positive response can be accepted with little hesitation. Only 1 false-positive result has been obtained to date. We feel that the frog does constitute a valid test animal for the diagnosis of pregnancy, provided that a sufficient interval is allowed before submitting the urine for study. A negative report obtained in the very first weeks of pregnancy must be accepted with caution.

TABLE 2

Male Frog (Rana pipiens) for Diagnosis of Pregnancy

	NUMBER OF CASES	PER CENT CORRECT	PER CENT INCORRECT	TOTAL ACCURACY, PER CENT
Positive	87	98.8	1.2	
Negative	65	84.6	15.4	
Total	152	92.72	7.2	92.7

CHEMICAL PROCEDURES

The chemical tests for pregnancy have always seemed more appealing as they serve to minimize the technical aspects of pregnancy testing. Three substances in the urine of pregnant women serve as the basis for the chemical tests most commonly recommended. In 1929, the presence of increased quantities of the amino acid, histidine, was reported in the urine of pregnant women.[3] Very shortly thereafter it was suggested as a pregnancy test and various investigators in Europe were strong advocators of its adoption.[4, 5] However, continued refinements in the technics for qualitatively detecting histidine revealed that it could be demonstrated in nearly all urines. In addition, it became apparent that urinary histidine was influenced by diet, the specific gravity of the urine, and the duration of pregnancy.[6] In spite of these objections, Carson and Saeks[7] in 1948 reported a method whereby these objections seemingly were overcome. By maintaining some control over the patient's diet and diluting the urine to a point where nonpregnant levels would be undetectable, they were able to report an accuracy of 95.1 per cent in confirming pregnancy and 92.6 per cent in confirming the absence of pregnancy. It should be kept in mind that these figures do not represent the accuracy of the procedure as a diagnostic tool in the differential diagnosis of pregnancy.

Pregnanediol, the excretion product of progesterone, is consistently found in the urine of pregnant women. However, it is also found in the urine of nonpregnant women between the time of ovulation and the following menstrual period and in quantities approaching those of pregnancy. If delayed ovulation can be ruled out in a case in which amenorrhea is present in an otherwise regularly menstruating woman, the results of the procedure can be accepted as indicating pregnancy. Pregnanediol may also be found in certain endocrine disturbances, but these seldom cause confusion. When the patient and her past history are familiar to the physician, this test can be used any time after the first menstrual period is missed and the results accepted as being conclusive. In addition, this test possesses the advantages of speed, although trained personnel and special equipment are required.

The most recent procedure to be advocated for the diagnosis of pregnancy was presented in 1949 by Richardson.[8] This investigator devised a chemical procedure of relative simplicity, and claims have been made that the reaction of the test is dependent upon the presence of free estrone in the urine of pregnant women. In 1950, a slight modification of this procedure[9] appeared in the literature utilizing a colorimeter for the reading of the end point. We have spent considerable time during the past year and a half studying this procedure. Our results have been poor, and in view of the rather spectacular accuracy reported by Richardson and confirmed by Merkel, we have checked and rechecked. Utilizing 2 morning urine specimens submitted by patients having routine Aschheim-Zondek tests performed, we soon found that they were inconsistent in their results. Of a total of 324 individuals studied (table 3), the 2 consecutive morning specimens were in agreement in only 64 per cent of the cases. In the remainder of those cases in which both specimens were both positive or negative, an accuracy of 37 per cent was found. This figure represents the percentage of total tests performed and of necessity includes those considered erroneous because of disagreement.

TABLE 3

Merkel Modification of Richardson Procedure for Diagnosis of Pregnancy

	TOTAL	CORRECT	INCORRECT	PER CENT ACCURACY
Tests in Disagreement	103		103	
Tests in Agreement	199			
Both Positive	149	98	51	65.7
Both Negative	31	14	17	45.1
Aborted	19			
Total	302	112	171	37.0

Because of our poor results an attempt was made to determine just what substances in the urine could react with 2,4 dinitrophenylhydrazine, the reagent employed in the test. This reagent lacks any specificity in the detection of free estrone, and many other hormone metabolites as well as many simpler organic compounds could react with it to produce a permanent color. Of the many organic compounds investigated, it appeared that pyruvic acid contributed a great deal to the characteristic brown color obtained. We found that a considerable number of men gave false-positive results, as well as nonpregnant women, particularly after exercise. In all of these cases the removal of pyruvic acid resulted in a negative test. From this and other data, we concluded that the lack of specificity of the reagent employed made this a doubtful test for our purposes.

Miscellaneous Procedures

A word should be said about some of the other tests for pregnancy which I have grouped together under the heading of miscellaneous tests. Prostigmine, 1.0 mg., injected intramuscularly on 3 consecutive days will usually induce uterine bleeding when the amenorrhea is due to emotional or neurogenic factors. It will not induce bleeding when pregnancy is the cause of the amenorrhea. A fairly high accuracy figure has been reported.[10, 11] Certain psychologic factors, however, have served to limit its use in pregnancy diagnosis. Many patients in whom bleeding is induced feel that the physician has produced an abortion because of their previous conviction that pregnancy existed. This delusion leads to unpleasant sequelae and a number of new patients. Its use in infertility problems may result in a greater turmoil if the patient feels that her pregnancy has been lost as a result of the drug employed. Because of these aspects, prostigmine has not been popular among clinicians as a whole.

The skin tests have been periodically brought to our attention. At least 3 substances have been utilized for this purpose, placental protein, pooled human colostrum,[12] and the gonadotropic hormones.[13] The basis for these tests lies in the assumption that the maternal host builds immune bodies to these protein substances, and their intradermal injection causes, therefore, no reaction. In the nonpregnant individual, a red wheal of various dimensions will appear, usually within 1 hour. These procedures lack sufficient accuracy for diagnostic use. Differences in skin reactivity, skin pigmentation, and individual sensitivity produce false results much too often.[14]

SUMMARY

A portion of the many tests which have been advocated for pregnancy diagnosis have been discussed briefly. Most of these procedures still leave something to be desired, either because of an insufficient degree of accuracy, or because the time interval involved sometimes precludes their adoption when time is essential. In spite of the continual evolution of new tests, the original Aschheim-Zondek procedure and its modifications are still our most reliable. The presence of gonadotropic hormones in the urine of pregnant females must be the basis for any future improvements in the light of our knowledge of early pregnancy changes. When more is known about the structure of gonadotropins, a chemical procedure will be forthcoming that can be acceptable to those of us who expect the most in accuracy. All substances at present utilized for chemical tests are not sufficiently altered quantitatively in the first trimester to serve as a reliable index that conception has occurred. We hope, sometime in the near future, to present evidence that the chemical determination of urinary pregnanediol will serve our purpose, provided that certain clinical criteria are present. In spite of this conviction, however, the feeling remains that tests involving urinary gonadotropins hold the most hope for the future. We could raise our accuracy figure without the necessity for new procedures if it were practical to employ 2 or more procedures on a given urine sample. It is obvious that the employment of even 3 or more tests would continually serve to eliminate more and more of those clinical conditions which simulate pregnancy.

It is essential to read carefully when the accuracy of new tests is reported. Because a test may be able to establish a difference between the normal pregnant group and the normal nonpregnant group does not necessarily indicate that it possesses equal accuracy as a diagnostic tool. Suitable study of a large group of patients under the conditions as reported here will establish whether or not it is acceptable for our purposes.

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ACTH AND CORTISONE IN THE ALLERGIC DISEASES

GRAFTON TYLER BROWN, M.D., F.A.C.P.
Washington

THIRTY years ago I encountered a physician's wife who was a martyr to intractable bronchial asthma. Her only relief was obtained from constant hypodermics of adrenalin, and she never left the house without carrying a loaded hypodermic syringe. For many years her only surcease from asthma had been during several pregnancies, at which times she experienced complete and dramatic freedom. At that time I wished for some substance or form of treatment that would duplicate the antiasthmatic effects of pregnancy, to be used for relieving this woman's suffering as well as that of numerous other intractable asthmatics. During the intervening years I have seen a number of other chronic asthmatics and sufferers from migraine headaches who reported complete freedom from asthma and headaches during pregnancy, similar to the relief experienced by victims of rheumatoid arthritis during the gravid state. It is true that an occasional woman develops asthma or has it become aggravated during pregnancy, but the reverse condition of freedom from asthma during the period of gestation is the rule.

With the discovery of ACTH and cortisone a few years ago, my wish of 30 years' standing was fulfilled. Shortly after publication of the sensational results in the treatment of rheumatoid arthritis with ACTH and cortisone, it was also reported that these same hormones were valuable in controlling severe allergic diseases. The use of ACTH and cortisone in the treatment of intractable asthma, severe eczema, and other allergic diseases is the newest development in the field of allergy.

ACTH is the abbreviation for adrenocorticotropic hormone, which is formed in the anterior pituitary. After being liberated by the pituitary gland into the blood stream, the adrenocorticotropic hormone is carried to the cortex of the suprarenal glands and stimulates them to produce cortisone and other steroid substances. Some 28 different steroids have been extracted from the cortex of the suprarenal gland, but cortisone (17 - hydroxy - 11 - dehydrocorticosterone), also known as Kendall's compound E, is the only one that has been successfully applied to the allergic diseases. Hydrocortisone (17-hydroxy-corticosterone), known as compound F, which is now being injected into arthritic joints with such gratifying results, may hold future promise in the field of allergy, probably by oral administration. It seems significant that ACTH stimulates the suprarenal cortices to liberate considerably more compound F than compound E.

The normal suprarenal gland in the adult human weighs an average of only 4 to 10 grams. These adrenal glands, small as they are, are vital to the life and health of the individual. It is an interesting observation that epinephrine is formed in the medulla or central portion of the suprarenal glands and gives such prompt relief in the acute asthmatic paroxysm, whereas cortisone is formed in the cortex or outer portion of the same gland and gives just as dramatic results in temporarily relieving the most severe types of bronchial asthma.

When properly administered, ACTH and cortisone seem about equally effective in the control of severe asthma, generalized allergic eczema, and other allergic diseases. When ACTH is injected, it stimulates the adrenal cortex to form and liberate cortisone, which does the actual work in relieving patients with bronchial asthma and other allergic diseases.

Epinephrine from the medullary portion of the suprarenal glands, acting through the medium of the hypothalamus, stimulates the anterior pituitary to give off ACTH, which in turn stimulates the suprarenal cortices to liberate cortisone. It might be assumed from this that adrenalin acts in bronchial asthma by releasing cortisone into the system, but the effect of adrenalin hypodermically is much too prompt and evanescent to be attributed to cortisone action

The manufacture of ACTH and cortisone requires complicated and tedious chemical procedures, and only recently has the supply equalled the demand. These valuable hormones, which have opened a new era in the practice of medicine, will be synthetically produced from more abundant sources, which will make them available to all who need them.

For hospitalized patients in status asthmaticus, ACTH should be administered in the form of a slow, intravenous infusion, by adding 25 mg. (25 international units) of ACTH to 1,000 c.c. of 5 per cent glucose in distilled water, the drip running 8 to 12 hours. A forearm or wrist vein should be chosen in preference to the elbow veins, to allow the patient greater freedom of motion. The lyophilized ACTH powder is first dissolved in about 2 c.c. of sterile normal saline and then added to the intravenous flask. Fifteen grams of aminophylline may also be added to the intravenous solution if desired. The advantages of giving ACTH intravenously are rapidity of action and economy of hormone. A relatively small dose of ACTH by vein is just as effective as a larger amount intramuscularly. The ACTH intravenous drip may be repeated daily with gradual reduction in daily dosage to 15 mg. and then 10 mg. as indicated.

When ACTH is given intramuscularly, it must be injected regularly every 6 hours. This usually necessitates hospitalization of the patient, or constant nursing attendance to maintain the regularity of the injections. The intramuscular dosage is usually 100 mg. daily, that is, 25 mg. (25 units) every 6 hours, which dose is gradually reduced to 20 mg., 15 mg., and then 10 mg., and the interval gradually widened to 8 and later 12 hours, as the allergic state yields to treatment. However, ACTH is now being put up in gelatin for slower absorption, so that the injections need be given only once or twice daily, or even every other day in some cases. The ACTH gel must be warmed gently to liquefy the preparation before it is drawn into the syringe. The total daily dosage for the ACTH gel is the same as for the regular aqueous form of ACTH.

Cortisone is marketed in the form of the acetate. Unlike ACTH, cortisone must never be injected intravenously. With the sterile saline suspension containing 25 mg. of cortisone to each c.c., the entire daily dose of 100 mg. may be given in a single, intragluteal injection of 4 c.c., thus making it practical for home or office administration. Better still, cortisone may be given orally in the form of 25 mg. tablets and has proved just as or even more effective by mouth. Cortisone given orally acts more quickly than by injection, probably due to the slower rate of absorption of the suspension from the tissues. However, cortisone given parenterally acts over a longer period of time. Consequently, for best results the cortisone tablets must be given at more frequent intervals, namely, 4 times daily or every 6 hours. When a 6-hour, around-the-clock schedule is not feasible, a tablet may be taken before each meal and at bedtime. The total daily dose of cortisone is the same orally as intramuscularly. When the response to 100 mg. daily is unsatisfactory, the dose is increased to 200 mg. daily, or if desired, the treatment is initiated with 200 mg. daily and then reduced as improvement sets in.

Treatment with ACTH or cortisone must never be terminated abruptly; the doses should be reduced gradually to give the pituitary and suprarenal glands a chance to resume normal functioning. Sudden stoppage of these hormones frequently results in an aggravation of the allergic condition.

In determining the approximate degree of allergic reaction present in the body, an absolute eosinophile count is considerably more accurate than the percentage of eosinophiles derived from a routine differential leukocyte count. The technic for doing an absolute eosinophile count is as follows:

Collect blood in a white blood cell pipette, just as for a white count, by drawing the blood up to the 0.5 line; then dilute with phloxine in propylene glycol stain to the 11 line on the pipette. Shake on the electric pipette shaker for 15 minutes. Take a Spencer bright line hemacytometer with improved Neubauer ruling, fill both sides, and let stand for 15 minutes. Then, using both sides of the counting chamber, count the entire 18 squares under low power. Multiply this total by 11.1 to obtain the total number of eosinophiles per cu. mm.

Explanation of factor 11.1 is that the ruled area on each side of the counting chamber with improved Neubauer ruling equals 9 sq. mm. with a depth of 0.1 mm. Therefore, after counting both sides or 18 squares, divide the total by 18 and multiply by 200, which is the same as multiplying by 11.1, to obtain the absolute eosinophile count.

The special eosinophile stain is made by adding equal parts of 0.1 per cent phloxine in propylene glycol and distilled water, and then paper-filtering the stain. This stain does not require refrigeration and is relatively stable, but it should be refiltered at frequent intervals. The eosinophiles are the only cells that take the red stain. The absolute eosinophile count normal range is from 50 to 400 eosinophiles per cu. mm. of blood.

This blood test usually shows abnormally high eosinophile counts in severe forms of allergy, and these high counts rapidly return to normal levels under treatment with ACTH or cortisone. Repetition of these absolute eosinophile counts during the course of treatment is a fairly reliable guide to the patient's response, as well as an aid in regulating the dose of the hormones.

If an absolute eosinophile count is done on a patient who is not under hormone treatment, 25 mg. of ACTH is injected and 4 hours later another total eosinophile count is done. This second count should show a drop of at least 50 per cent when compared with the first count, providing the patient's suprarenal glands are capable of normal functioning. This is known as the Thorn test. Of course, when the suprarenals do not respond satisfactorily to the ACTH stimulus, cortisone should be used instead.

One serious drawback to the use of these potent hormones is that they tend to produce undesirable side-effects, particularly when given in excessive dosage or for prolonged periods. ACTH and cortisone may cause retention of sodium and fluid in the tissues resulting in an abnormal gain in weight, an enlarged abdomen, ankle edema, a round, moon-like face, menstrual irregularities, and facial hirsutism in the female. Others have reported also acne, buffalo hump (cervicodorsal hump), cutaneous striae, increased blood sugar or glycosuria in the diabetic or potential diabetic, aggravation of an existing infection such as tuberculosis, delay in wound healing, and aggravation of preëxisting mental or emotional disturbances.

Burrage and his associates[1] have reported clumping of the cellular elements of the blood of the bulbar conjunctiva in asthma patients during treatment with cortisone. This sludging of the blood may not be harmful, but who knows? Fortunately, all of these side-effects, other than the skin striae, are reversible and disappear when use of the drugs is stopped. Nevertheless, these side-reactions emphasize the need for careful selection of patients who are to receive these potent hormones, conservative regulation of doses, and close medical supervision of all patients on this form of therapy. When I first started to work with ACTH and cortisone, extensive laboratory procedures were done, most of which were later found unnecessary, since careful clinical observation and routine laboratory tests are all that are usually required. As ACTH and cortisone suppress inflammation, fever, and pain, they may mask the presence of some intercurrent infection or acute surgical condition. Judging from the effects, the action of ACTH or cortisone is pharmacologic rather than physiologic, and the amounts used are probably larger than those normally present in the body.

While taking ACTH or cortisone, patients were told to eat a high protein, vitamin-rich, low-salt diet, and drink only a moderate amount of water. Since they were advised not to use salt for seasoning their food, a salt substitute was frequently welcomed. Since ACTH and cortisone cause potassium to be eliminated from the system, potassium was prescribed in the form of potassium iodide for asthmatics and potassium chloride for other types of allergy. Some asthmatics were given both the chloride and the iodide of potassium, and the occasional asthmatic who could not tolerate iodides was given the potassium chloride alone. Potassium chloride was prescribed in the form of 5-grain (0.3 Gm.), enteric-coated tablets, 1 or 2 to be taken 4 times daily. Potassium iodide, 30 to 60 grains (2 to 4 Gm.) daily, was administered in the form of either 0.5 or 1 gram, enteric-coated tablets, or as the saturated solution.

During the past 2 years I have found it advisable to resort to ACTH or cortisone in only 47 patients with intractable asthma, bronchitis, dermatitis, or hay fever. In only 1 of these patients have I observed sufficiently serious side-effects to necessitate discontinuance of the hormone treatment. The results in the majority of these patients were excellent and in some almost unbelievable. It should be pointed out, however, that not every asthmatic or eczema victim is relieved by ACTH or cortisone. Most of the asthmatic sufferers who were gasping for every breath, within a few days under ACTH or cortisone lost all symptoms of the disease and gained rapidly in strength and general well-being. In status asthmaticus the use of these hormones may be a life-saving measure. The victims of generalized allergic eczema saw the unsightly, itching dermatitis rapidly disappear and their entire appearance change to that of normal health. A marked increase in appetite and gain in weight are experienced by nearly all patients on cortisone or ACTH.

For relieving severe asthma, ACTH and cortisone are the most potent weapons available since the discovery of adrenalin 51 years ago and the use of aminophylline intravenously, first reported in 1933.[2]

I have treated 29 intractable asthmatics with ACTH or cortisone, a number of them being in severe status asthmaticus. Most of these responded dramatically, and there were only 2 failures in the group, with 1 death. The patient who died was a 72-year-old female who had almost constant dyspnea aggravated by the slightest exertion. Although the doses of both ACTH and cortisone were pushed until the absolute eosinophile count was down to zero and she developed rather severe toxic effects from the drugs, there was no relief of the dyspnea. Likewise, all other forms of treatment failed to bring relief. She died, apparently of anoxia of the brain, and the autopsy revealed emphysema, pulmonary fibrosis, and one collapsed lung. The other failure was a bacterial asthmatic who was also sensitive to house dust. This patient failed to improve under the use of cortisone orally, even though he developed an eosinopenia in response to the drug.

As for the successes among the asthmatics, 1 patient, who was brought in as an ambulance case under oxygen lost his status asthmaticus under continuous intravenous aminophylline therapy, only to relapse again. He was then started on ACTH over 2 years ago and has been kept practically free of asthma ever since with small maintenance doses of ACTH. He is now getting 10 mg. (10 international units) of ACTH gel 2 or 3 times a week. His eosinophile counts stay remarkably low. This was certainly a gratifying result for a 74-year-old man. Two female patients with status asthmaticus were first treated nearly 2 years ago with ACTH in the hospital, then with cortisone injections in the office, and still later with cortisone orally in maintenance doses of 37½ to 75 mg. daily. As a result, they have been kept relatively free of asthma during this period. These 2 patients started with absolute eosinophile counts of from 1,300 to 2,800 eosinophiles per cu. mm. and now run total counts of around 250 to 300 eosinophiles. Other asthmatics have been kept practically free of asthma for months at a time with maintenance doses of 2 or 3 cortisone tablets daily.

One asthmatic, who was a potential diabetic with a fasting blood sugar between 171 and 139 mg. per 100 c.c., was put on a low carbohydrate diet and given cortisone orally. His fasting blood sugar came down to 127 mg. and stayed there after the use of cortisone for over a month, and there has been no glycosuria at any time. One male asthmatic reported considerably increased libido when he started taking cortisone.

Asthmatic bronchitis has responded dramatically to cortisone, even when the pre-treatment eosinophile count was within normal limits, although I feel there is considerably more justification for the use of ACTH or cortisone in allergic disease when the eosinophile count is high. Patients with asthma and bronchitis under treatment with cortisone or ACTH report considerable reduction in the amount of sputum.

Eleven patients with intractable dermatitis were treated with cortisone, with only 2 failures. One of the failures was a severe case of contact dermatitis from paradichlorobenzene in clothing treated with these moth crystals. The other failure was a 76-year-old woman with a generalized pruritic dermatitis and no demonstrable sensitizations. In these 2 patients, the oral use of cortisone neither relieved the itching nor improved the dermatitis. Most of the other patients with dermatitis experienced gratifying relief, which in some instances was dramatic. Unfortunately, the relief for the chronic skin cases lasts only while the cortisone is being continued and for a short time after the hormone is stopped. As in chronic bronchial asthma, within a matter of days, weeks, or at most a few months after the drug is discontinued the trouble recurs. One of these allergic dermatitis patients has been under cortisone treatment now for nearly 2 years, first by injection and later orally, with only 1 interruption of 3 months. Her present maintenance dose is ½ tablet every 6 hours. She started with an eosinophile count of over 5,600, and it is now running around 300. One probable side-effect in this patient has been hypermenorrhea. However, the improvement in her skin has been wonderful, she has gained 34 pounds in weight, and she is a transformed individual, both mentally and physically.

One patient with refractory poison ivy dermatitis cleared promptly under the oral use of cortisone. It is an interesting observation, however, that another patient developed rhus dermatitis while he was taking cortisone regularly for asthma.

Four patients with urticaria and angioneurotic edema were treated with cortisone orally with no failures. Two of these patients with rather severe urticaria from penicillin sensitization cleared completely with cortisone, but 1 of them had a relapse when the hormone was abruptly discontinued, and the other had a recurrence when he inadvisedly took penicillin again for a carbuncle and cellulitis. The latter patient, a physician, reported that, while taking cortisone for chronic bronchial asthma, he developed hypertension which led him to stop using the drug.

One of the other 2 patients had chronic angioneurotic edema involving the ears, along with recurrent conjunctivitis, and the other 1 had chronic urticaria and angioneurotic edema. Both of these patients improved more under the oral use of cortisone than from any other form of treatment but were not entirely relieved.

Two patients with refractory hay fever were given cortisone orally and both responded gratifyingly. One of these had very severe grass pollen hay fever, and the other had ragweed pollen hay fever and asthma. Both patients promptly became symptom-free on cortisone and continued so throughout the season. The latter of these patients complained of excessive perspiration while taking cortisone.

One patient with chronic allergic sinusitis obtained gratifying relief under treatment with ACTH and cortisone.

In my allergic patients there has been no detectable change in their positive skin reactions as a result of treatment with ACTH or cortisone. It is obvious that these hormones do not work by diminishing or removing the fundamental sensitizations.

It is to be hoped that the widespread use of ACTH and cortisone in the various allergic diseases will tell us more about the fundamental cause of allergy, which is still unknown. Unfortunately, ACTH and cortisone do not cure allergic disease but merely block the allergic process during the period of administration and for a relatively brief time following withdrawal of the hormone. Therefore, it is just as necessary as ever to diagnose and treat the basic sensitizations or infections by means of thorough skin-testing, elimination or avoidance of offending food or inhalant allergens, specific hyposensitization, bacterial vaccines, penicillin injections, and other accepted measures.

SUMMARY

ACTH and cortisone have been discussed with particular reference to their use in the treatment of 47 patients with severe allergic disease. Most of these patients experienced gratifying relief which in some cases was remarkable, and there were only 4 failures. The method of administering these hormones, with dosage and precautions, has been described in detail.

ACTH and cortisone are the most potent remedies available for the temporary relief of intractable bronchial asthma or status asthmaticus, asthmatic bronchitis, allergic dermatitis, and hay fever. With proper regulation of doses, treatment with these hormones may be continued for months or even years where necessary, without the development of serious side-effects. As ACTH and cortisone do not cure allergic disease or alter the fundamental sensitizations, specific avoidance, hyposensitizing injections, and other therapeutic measures are essential for proper management.

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THE CAUSE AND TREATMENT OF HYDRONEPHROSIS*

DAVID M. DAVIS, M.D.

Professor Emeritus of Urology, Jefferson Medical College

NOT long ago a respected colleague of mine wrote that he had treated a patient by "successful nephrectomy." I submit that to perform nephrectomy, except for malignant neoplasm or irreparable traumatic damage, is in itself a substantial confession of medical failure. By far the greater number of nephrectomies are performed because a kidney has had its usefulness irreparably destroyed by obstruction, by infection, or by stone formation, or by some combination of two or more of these conditions. Since all of them are subject to cure by surgical means, the organ can be saved and restored to usefulness, if the diagnosis is made early.

In the past we have been hampered by ignorance of the pathogenesis of the obstructive-infectious nephropathy, by a lack of knowledge on the part of the general medical profession of the means by which early diagnosis can be made, and by serious deficiencies in surgical technic for the repair of discovered abnormalities. We are still far from having attained perfection in any of these directions, but great progress has been made in recent years, and I hope to be able to demonstrate some of it.

Frank Hinman was the first, I believe, to express clearly and forcibly the relationship existing between obstruction and infection. The fundamental importance of this concept has unfortunately escaped general recognition, and it cannot even today be too strongly emphasized. The slowness with which physicians have adopted this concept is explained by the following facts.

First, many obstructions are slight and serve only to slow and impede the flow of urine through the urinary passages, not to arrest it completely, and therefore cause few or no symptoms. Second, such obstructions are often difficult to demonstrate, so difficult that many observers have been driven to believe that hydronephrosis is often due to neuromuscular disorders, developmental defects, etc., and not to obstruction.

In a modern study of hydronephrosis we must concern ourselves not only with the hugely dilated, irreparably damaged kidneys often presented as examples of this condition, but also, and even more particularly, with the early stages, in which restoration of the kidney to a condition of usefulness is possible. In such a consideration we must keep in mind that infection complicates small hydronephroses as often as it does large ones, and that slight degrees of hydronephrosis cannot be overlooked in cases of persistent infection if we are to accomplish lasting cures.

Congenital obstructions of the ureters, particularly of the upper ureters, are very common. This was recognized by Albarran and by other early investigators but was then largely forgotten. The subject was reopened in 1942 by Karl Östling[1] of Stockholm, working under the direction of Professor John Hellstrom. His magnificent monograph, "The Genesis of Hydronephrosis," should be required reading for every urologist. Östling notes that the narrowings and valvelike folds in the upper ureter of the fetus were observed by various writers as long ago as 1877, but that interest in these findings has languished in recent years. In a longitudinal section of a ureter from a 16 cm. fetus Östling shows that the mucosa is folded but the adventitia not (figure 1). If the adventitia is cut opposite a spiral fold and the mucosa pulled out longitudinally, it can be seen that the fold really represents a narrowing. Figure 2 (Östling) is intensely interesting. The photographs are of casts of the ureters of newborn infants. On the left is a smooth narrowing, on the right an extensive system of spiral valve-like folds.

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* Delivered at the Twenty-third Annual Scientific Assembly of the Medical Society of the District of Columbia, October 1, 1952.

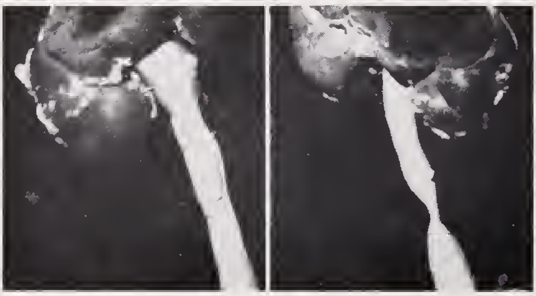

Fig. 1. Left panel: upper ureter of newborn infant with many valve-like folds in ureter. Right panel: after incising adventitia and muscularis and pulling out epithelial lining longitudinally, it is seen that a fold represents a definite narrowing in the lumen (Östling).

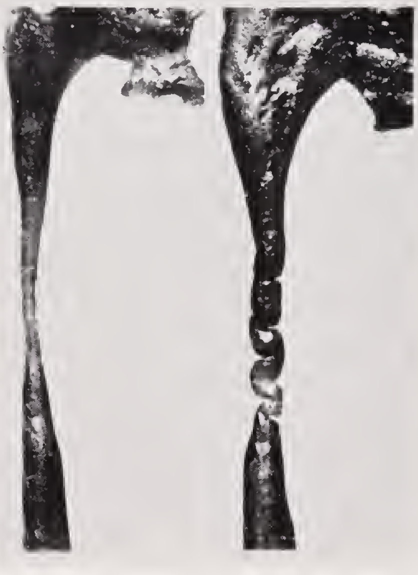

Fig. 2. Casts of the upper ureters of two newborn infants. Left, smooth but prolonged narrowing; right, spiral valve (Östling).

In some of the specimens with a narrowing in the upper ureter definite hydronephrosis involving both pelvis and calices is already present, thereby proving that hydronephrosis can occur before birth. Östling calls attention to the immense muscular hypertrophy which may occur in the wall of the hydronephrotic pelvis; this is exactly the same phenomenon which occurs in the wall of the obstructed bladder.

Aberrant blood vessels have been given a predominant role in the causation of ureteropelvic obstruction. Such a vessel may, by pressing upon the ureter, be the sole cause of obstruction, but all careful studies indicate that there is usually a ureteral narrowing in addition. This serves to explain the numerous instances in which division of an aberrant artery fails to cure a hydronephrosis. Figure 3 demonstrates the point very well.

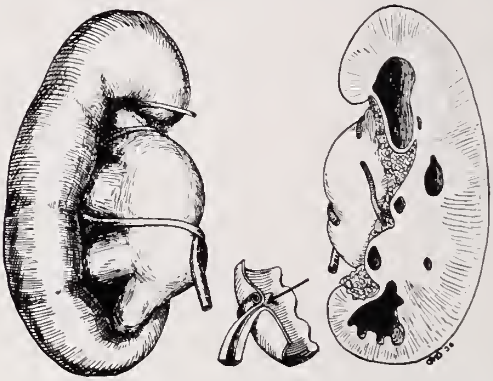

Fig. 3. Operative specimen showing hydronephrosis and aberrant artery crossing ureteropelvic junction. Left, external view; right, sectional view showing how aberrant artery indents pelvis; middle, marked ureteropelvic narrowing, which would not be relieved by division or removal of the aberrant vessel.

An aberrant artery presses upon the ureter just at the ureteropelvic junction and is stretched over the surface of the distended pelvis in such a way that its pressure upon the ureter must increase constantly as the hydronephrosis increases. Section of the ureteropelvic junction, however, as shown in the small drawing in the middle, discloses a very marked stenosis of the junction, which would not have been affected by division of the artery.

The clinical picture of large hydronephrosis is familiar to everyone. It is now necessary, however, to consider the possibility of hydronephrosis in every case of persistent or recurrent infection, and, in other cases where there is no infection but where the symptoms are persistent renal pain, hematuria, or reflex gastrointestinal symptoms, sometimes of great severity.

Early diagnosis is not always easy, particularly when there is no infection. Since the size of the normal pelvis varies a good deal, an early or slight hydronephrosis is often overlooked in an intravenous urogram or in a simple retrograde pyelogram. One of the best methods of early diagnosis is a study of the emptying time of the pelvis. This cannot be done by intravenous urography, since one does not know how much of the radiopaque medium is being secreted into the pelvis during the period of observation. It must be done at the time of retrograde pyelography. After taking the usual films with the catheter in the ureter, the pelvis is left full of opaque medium and the catheter withdrawn. The patient is then placed in the erect position, and films are taken at suitable intervals. One may say that normally the pelvis should be empty at the end of 8 minutes after the withdrawal of the catheter. If an appreciable amount of opaque solution remains in the pelvis after 10 minutes, it is certain that its emptying mechanism is seriously deranged, usually by obstruction at the ureteropelvic junction or at some point in the ureter, or possibly in some few cases by neuromuscular deficiency.

This method is well illustrated in the case of a 25-year-old nurse who had suffered for 2 or 3 years with generalized abdominal pain, anorexia, nausea and vomiting. The pain was more severe on the right side, but was not localized in the kidney region. The gastrointestinal symptoms were so severe that her weight had fallen from 135 to 92 pounds. The right kidney pelvis was so slightly dilated that it did not seem to anyone that it could be held accountable for the trouble. However, all other studies gave negative results, and the pelvis showed marked retention at the end of 10 minutes. Operation was finally performed, with relief of extrinsic and intrinsic ureteropelvic obstruction. All symptoms promptly disappeared. At this time, 4 years after operation, the patient is perfectly well and very active, and her weight has returned to normal.

In another case there was no pain, and the only symptom was an attack of hematuria, the blood coming from the left ureter. The patient was a 45-year-old physician. A pyelo-ureterogram was interpreted as normal, but, since there had been some resistance to the passage of the catheter, the ureter was dilated progressively to size no. 14 French. Further pyelograms were made 2 and 6 months later, all by the gravity method with the same pressure, so that they were exactly comparable. These showed the pelvis, infundibula and calyces markedly reduced in size, in fact, about one third their former size. Obviously, the first pyelogram, interpreted as normal, was actually a well-marked hydronephrosis, which became reduced to normal after adequate dilation of the ureteral narrowing. The patient has remained perfectly well for over 12 years since these films were taken. If such methods of investigation are used, many early diagnoses will be made and many late tragedies averted.

If the obstruction is in the lower part of the ureter, it can often be overcome, as in the last-mentioned case, by thorough mechanical dilation through a cystoscope. In other cases operation is necessary. The operation may be the removal of a ureterocele, re-implantation of the ureter into the bladder, or direct operation for the relief of undilatable strictures. Such operations should not be avoided merely because the ureter is greatly dilated above the obstruction. If there is any evidence of surviving parenchymal tissue, the degree of recovery may be really spectacular. As an example of this, I cite the case of a young woman with complete double pelvis and ureter on the left side. The ureter from the lower pelvis entered the bladder at the normal position, and it and the pelvis were perfectly normal. The ureter from the upper pelvis had at its lower end a large ureterocele, with a pin-point opening into the bladder. In the ureterocele was a stone 1 cm. in diameter. Above the bladder the ureter was enormously dilated, with a wall about 4 mm. thick, containing a stone over 2 cm. in diameter. At operation both stones were removed and the ureterocele amputated. Above the stones the ureter was full of thick pus. Eight months later intravenous urography showed both pelves and both ureters on the left side normal in outline. Urine obtained from both left ureters was clear and sterile.

Most of the stenoses in the upper ureter demand surgical operation. Extrinsic causes of obstruction, such as adhesions, bands and aberrant vessels are removed, but intrinsic stenoses must be sought for. Pyelotomy and exploration of the ureter with bulbs are necessary and should never be omitted. Numerous methods of dealing with intrinsic stenoses have been devised. Longitudinal incision with transverse suture (Miculicz) is wrong in principle and not infrequently makes the obstruction worse. It should therefore be abandoned. The 3 types of plastic repair commonly used are the Foley-Schweitzer Y-plasty, the "pyeloplasty" operation, and reimplantation of the ureter into the pelvis, or ureteropyeloneostomy. There has been much debate as to whether the operative site should or should not be intubated following such operations. As time has gone on, the consensus has gradually turned in favor of intubation. In a number of cases in which plastic repair was impossible for one reason or another simple intubation of a longitudinally split ureter gave good results.

The first to do this was Dr. Edward L. Keyes[2] in 1912, but it was done only rarely. In the late thirties it occurred to me that it ought to be suitable for routine use, and in 1943 I made my first contribution on the subject of intubated ureterotomy in an article published in *Surgery, Gynecology and Obstetrics*.[3] A further report[4] was made to The American Urological Association at its meeting in Buffalo in 1947 in collaboration with Dr. George H. Strong and Dr. Willard Drake. In these articles I expressed the opinion that this operation would prove to be the most practical and the most successful procedure for all intrinsic ureteropelvic and upper ureteral narrowings. Since that time experience has in my own case strengthened this opinion, and I have heard many reports of successful operations performed by others. The points of superiority are: First, the operation is equally applicable to all cases, regardless of the length, location or multiplicity of the strictures; second, it is simple and rapid of performance; third, no sutures whatever are used, so that no dependence need be put on the holding of sutures; and fourth, since the splinting tube can be left in place as long as desired, good results have been obtained in many cases even in the presence of gross infection.

In the first case in which I used the operation of intubated ureterotomy the pelvis was entirely intrarenal and the stricture so close to the kidney that no type of plastic operation was possible. The narrowed area was incised longitudinally and splinted with a rubber tube about 5 mm. in diameter. The same tube was fenestrated and brought out through a nephrotomy incision, providing urinary drainage. The tube was left in place 2 weeks. An intravenous urogram made 8 months after the operation showed the narrowing completely obliterated (figure 4).

Another case is that of a 24-year-old woman. The right kidney was a functionless pyonephrosis containing many large stones. The left kidney had given no symptoms. The urine from it was sterile and the function was good. The left pyelogram, however, showed a well marked hydronephrosis and a lengthy narrowing of the upper ureter. Following the pyelogram the left kidney became infected and the patient very ill, with pain, fever and chills. Since this infection resisted all treatment for 2 weeks, operation on the left kidney became necessary. The state of affairs is shown in figure 5. For 12 cm. the ureter was extremely narrow. No plastic operation could, by any stretch of the imagination, be considered. The ureter was incised longitudinally for the entire length of the stricture, and the gap bridged by a size 14 gallbladder T-tube. The narrow strip of ureter was held against the tube by a few sutures of fine catgut. The stem of the T-tube provided urinary drainage. The tube was left in place for 4 weeks. A radiogram taken just before its removal showed that the ureter was reëstablished. Convalescence was uneventful, and a short time later the right kidney with its stones was removed. An intravenous urogram taken 8 months later showed the ureter fully reëstablished and of normal size, with the hydronephrosis still present. The patient has remained perfectly well, the urine sterile, and the renal function normal. Seven years later the intravenous urogram showed the pelvic outline to have returned entirely to normal. The ureter is evidently functioning normally, despite the serious disturbance of its musculature which must have occurred.

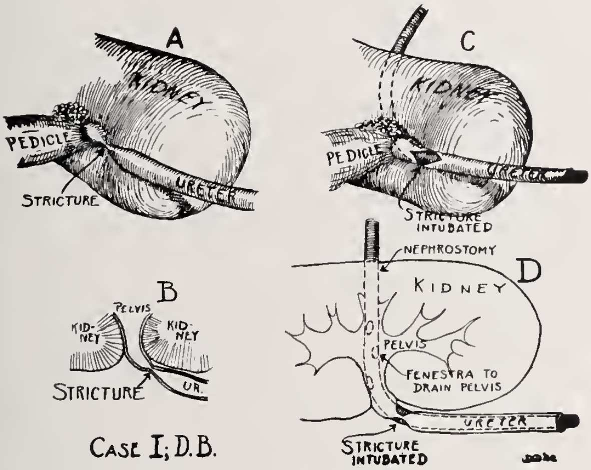
A
KIDNEY
PEDICLE
STRICTURE
URETER
C
KIDNEY
PEDICLE
URETER
STRICTURE INTUBATED
B
PELVIS
KID-NEY
KID-NEY
STRICTURE
UR.
CASE I; D.B.
NEPHROSTOMY
D
KIDNEY
PELVIS
FENESTRA TO DRAIN PELVIS
URETER
STRICTURE INTUBATED

FIG. 4. Diagram showing operation performed. Note absence of extrarenal pelvis. A—location and appearance of stricture; B—Sectional view of stricture; C—ureter split and intubated; D—splint tube, fenestrated to drain pelvis, emerging through parenchyma. The tube remained in place 3 weeks, result excellent.

In this operation reliance is placed upon the regenerative power of the ureteral epithelium to create a new and larger ureter molded about the splint tube. Animal experiments indicate that the muscular coat also proliferates and eventually surrounds practically the entire circumference of the ureter. Direct observation of these animals and X-ray films of human cases appear to show normal peristalsis in reconstructed ureters.

It is now possible to intubate the entire length of the ureter. The splint tube can be drawn through the entire length of the ureter, if desired, by means of a special bulb attached to an instrument passed up the ureter before the operation. Sanding of the tubes must be prevented by acid irrigations and other precautions taken to insure a good result.

With greatly improved surgical methods available, it is now clear that all ureteral and ureteropelvic obstructions should be treated as soon as discovered and relieved in order to protect the kidneys from further damage. The decision as to whether to employ conservative surgery or to carry out nephrectomy in the case of badly damaged kidneys remains unfortunately as difficult as ever. One can only say that better surgical methods make it more often possible to repair a damaged kidney sufficiently to justify removal of its more greatly damaged fellow. When this is not possible one must do the best he can to restore proper drainage, that is, normal ureteral function. In this situation the surgeon must make sure that the restored ureter functions at least as satisfactorily as the pyelostomy or nephrostomy tube which is draining urine from the kidney. Radiopaque solution injected through the

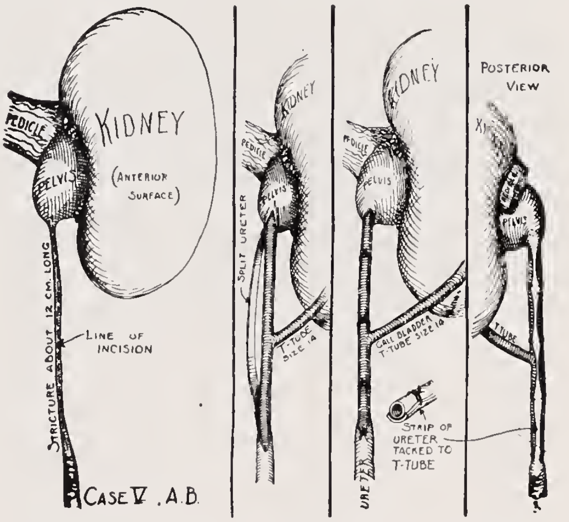
KIDNEY
(ANTERIOR SURFACE)
PEDICLE
PELVIS
STRICTURE ABOUT 12 CM. LONG
LINE OF INCISION
CASE V. A.B.
KIDNEY
PEDICLE
PELVIS
SPLIT URETER
T-TUBE SIZE 14
KIDNEY
PEDICLE
PELVIS
CALL BLADDER T-TUBE SIZE 14
URETER
STRIP OF URETER TACKED TO T-TUBE
POSTERIOR VIEW
PELVIS
T-TUBE

FIG. 5. Diagram of operation to split and intubate ureter with T-tube.

tube will tell one immediately whether fluid is transported quickly to the bladder. The tube may be connected to a vertical manometer tube to see how much intrapelvic pressure is necessary to cause all the urine to pass down the ureter. Unfortunately we do not know as much as we should concerning pressure conditions in the pelvis, but personal observations permit me to say that good function can be maintained with an intrapelvic pressure of 12 cm. of water. If the tube is then clamped, a film taken 10 minutes later will tell whether the pelvis empties promptly. If it does, the tube is left clamped 2 or 3 days or longer to make sure that pain and fever do not occur. Then and only then may it safely be removed.

In general, the situation in regard to the surgical treatment of hydronephrosis has improved enormously in the past 15 years for the following reasons: (1) Infection can be prevented and controlled better than ever before; (2) better surgical methods are available; (3) earlier diagnosis is possible; and (4) better results justify and, indeed, demand early operation.[5,6]

With increasing knowledge comes the necessity for ever greater technical accuracy and attention to the smallest detail, not only in the operating room but in the postoperative care. The urologist must concentrate intently on this work, and if he does he will be richly rewarded in good results and grateful patients. To the medical profession in general the significance of these advances is that conditions such as those described, and especially chronic pyelitis or pyelonephritis, for which no successful treatment was formerly available, can now be handled with great success, and often permanently cured.

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MEDICINE AND AVIATION*†

REAR ADMIRAL BERTRAM GROESBECK, JR., M.C., U.S.N.

Commanding Officer, National Naval Medical Center

I SHOULD like to disabuse your minds of any doubts which may have arisen and assure you that I am here neither to proselyte nor recruit. The purpose of what I will have to say is to bring to your attention the fact that opportunities for service exist in the field of medicine which are not primarily concerned with the actual treatment of the sick. Many of these fields exist and I have selected but one of them, the field of aviation medicine, to point out to you that the man of medicine can make a considerable contribution in the advancement of industry and the expansion of civilization. Quite obviously, in developing this point, it will be necessary to mention the aviation activities of the armed forces, and I wish to assure you that any appearance of emphasis on the part played by the Navy is entirely coincidental.

Dr. Bloedorn has at least intimated that my first appearance in this room occurred some 39 years ago as a freshman in the School of Medicine. As I recall it, the original ambitions of my classmates were singularly unanimous in that it was our desire to devote ourselves to the healing of the sick and that fields other than those of what we may call the actual practice of medicine appealed to us very little. Of course we heard of Koch and Pasteur, but they were foreigners; and we heard of Walter Reed and Gorgas, but they were in the Army. A career in a field of medicine which had to do with things other than the care of the sick was very far from our minds. Of course, I must admit that research in those days in the many fields of medicine had not reached the prominence that it occupies today. With the exception of some privately endowed activities no such wonderful opportunities for research as will be supplied by the National Institutes of Health in clinical research, for example, were even on the drawing boards.

It was perhaps natural then that about 95 per cent of our graduating class were determined to become surgeons. Possibly some of us would eventually have gravitated into fields of endeavor other than the general practice of medicine or surgery, but for the majority of us at least our plans were considerably modified by the onset of World War I, which exposed us to newer concepts and broader horizons in the practice of our profession and stimulated newer interests.

It was at about this period that an impetus was given to aviation in general, and military aviation in particular, as the result of the utilization of aircraft as combat weapons in World War I, and it was also about this time that aviation medicine began to be recognized, if not as a specialty, at least as a field for development. I shall presently say a few more words about the early days of aviation medicine, but I want first to indicate the tremendous strides that have been made in the performance characteristics of military and commercial aircraft.

I shall not go as far back as Langley and the Wrights to make comparisons, but I would like to tell you that in 1922 the training planes in the Navy had a phenomenal speed in excess of 50 miles an hour and it required some 45 minutes to get them to their maximum ceiling of 6,000 feet. In the following year, 1923, the famous Schneider Cup Race was won by an American plane which flew approximately 177 miles an hour and which, mind you, was a plane designed as a racing plane and therefore for maximum speed.

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* Delivered at the Opening Assembly of the George Washington University School of Medicine, September 15, 1952.

† The opinions or assertions contained herein are the private ones of the writer and are not to be construed as official or reflecting the views of the Navy Department or the Naval Service at large.

A year later the now General Doolittle stepped up the speed to approximately 250 miles an hour, which was a breath-taking achievement. In 1925 a Navy combat plane reached the terrific altitude of 14,500 feet. That was 27 years ago.

In July of this year at a press conference, the Office of Information of the Navy Department was asked how fast and how high the Navy's Skyrocket had flown, and the answer was that the plane had flown at 1,238 miles an hour and had reached an altitude of 79,494 feet. That speed, of course, is far beyond the speed of sound, an achievement which was considered unattainable 27 years ago.

I must admit that the Skyrocket and its counterparts in the Air Force are entirely experimental designs and at present have no military or commercial use. However, their performance, both as to speed and altitude, is a definite indication of what is coming, and coming in the not too distant future at that.

The contrast in performance of military aircraft is really no greater than that of commercial ships, but today we all take for granted the fact that we can fly comfortably at a speed in excess of 300 miles an hour and that we can exist without discomfort in pressurized cabins at 16,000 to 19,000 feet. Only recently jet engines have been installed in commercial planes and are being successfully operated abroad. And still more recently, as I am sure you have read in the daily press, a jet-powered bomber has made a round trip between England and North America within a span of 24 hours.

It would be ridiculous for me to attempt to detract from the achievements of the aeronautical engineers in providing such amazing advances in both power plants and aircraft design. Their foresight, vision and utilization of technical skills have been tremendous. On the other hand, I can assure you that but for the contributions of medical personnel no one today would have flown at 1,238 miles an hour and no one would have reached 79,000 feet.

The first interest in the medical aspects of flying in this country was shown at about the same time that airplanes were introduced into the military services. The accident and mortality rates among student pilots, and in fact among graduate pilots as well, was extremely high, and both the Army Signal Corps, which then had cognizance of Army flying, and our own service acquired the idea that these high accident and mortality rates might be controlled by a more careful examination of the physical qualifications of the officers and men who entered aviation. I do not know who was responsible for the original interest of the Bureau of Medicine and Surgery in this particular problem, but I have searched back through the records, and the earliest directive relative to physical qualifications for aviation duty appears to be one issued in October 1912.

You may recall from having seen old photographs of the earlier flying machines that the pilots sat out in front of the machine and used both arms and elbows and knees in the manipulation of the controls. It is possibly because of this that this early directive insisted on a very comprehensive examination of all joint mobility, even to the extreme of requiring the candidate, while in a standing position, to kick himself in each breast with his knee, a feat which I have never seen accomplished, much less accomplish myself.

The attitude of our medical people apparently underwent a change, undoubtedly for the better, because in a subsequent directive more emphasis was placed on equilibrium and less on joint mobility. Furthermore, the cardiovascular system also came in for consideration, and the candidate was put through some rather rigorous exercises, including one in which he was to leap into the air and strike the buttocks with both heels at the same time. Apparently there was some doubt as to the reaction of the examiner as well as of the candidate, because it is amusing to quote the following: "While the exercises hereinbefore prescribed may cause some breathlessness and accelerated throbbing of the blood vessels, they should not cause manifest exhaustion or great distress in a healthy man. Lack of ability to perform any of these exercises indicates some defect or deformity that should be investigated."

When World War I broke out, the increase in aviation activities brought the attention of the authorities even more forcibly to the fact that the attrition rate was excessively high, and at this time the then Army Signal Corps requested its Medical Department to thoroughly review the physical requirements for students and pilots. With the assistance of a group of highly specialized physicians a new set of physical standards was developed and adopted, one which has continued to be the basis for our physical selection procedures up to the present time. There have been, of course, minor modifications, and there is still the search for a completely satisfactory cardiovascular efficiency test, but in general the old standards of 1917 remain in effect.

Although the increased performance of the aircraft of today requires the utmost in physical fitness, we are not anticipating any radical changes in our requirements. Both because of this increased performance and because of the economic aspects of the various aviation training programs we are now placing more stress on the development of selective procedures of the neuropsychiatric, psychologic, and psychomotor types in an attempt to enter into our training programs individuals who will be more liable to successfully complete the training courses and to successfully fly our aircraft after the completion of their training periods.

A few moments ago I made the statement that without the efforts of our medical men present speeds and altitudes would not have been attained. I have no fear of that statement being contradicted, but it will probably be of interest if we take a brief and limited look at the role that doctors played in enabling man to fly so high and so fast.

One of the earlier problems was that introduced as the result of increased ceilings in aircraft. I shall not go into the details of the physiology of respiration, but I am sure you all realize that the higher one goes, the less oxygen is available to him, and that as his oxygen supply is decreased he eventually reaches a state of anoxia or hypoxia, if you will, which will cause loss of consciousness, and if sufficiently severe, will cause death. That physiologic limitation was immediately recognized as a critical factor in high flying, and the question of oxygen supply became a very warm issue.

With the assistance of medical men interested in aviation, various schemes of oxygen supply were developed culminating in those which are in use today, namely, the so-called Diluter-Demand oxygen supply and the pressurized oxygen systems. The Diluter-Demand apparatus supplies oxygen to the pilot in increasing concentrations as the pilot's altitude increases, and in the neighborhood of 34,000 feet he is being supplied with 100 per cent oxygen at his nose and mouth. Under these conditions, varying, of course, with the individual and even from day to day in any one individual, he may safely fly to about 40,000 feet without developing any serious degree of anoxia.

Since that isn't high enough for military aircraft, an attempt was made to pressurize the oxygen system. Because our ability to absorb oxygen depends upon the partial pressure of that gas in the alveoli of the lung, it seemed quite logical that if the oxygen were delivered at the nose and mouth at a higher pressure than normally obtains, the alveolar partial pressure of the oxygen would be higher and the ability of the individual to absorb that oxygen would be increased.

Well, it actually works that way, but it was found that there are definite physiologic limitations to the amount of pressure which can be applied, the result being that our ceiling was not increased by more than 3,000 or 4,000 feet. The next step was the equally logical one of pressurizing the pilot's cockpit to enable him to operate in an atmosphere at considerably higher pressure than existed in the ambient air outside his enclosed cockpit. That works fine and theoretically there is no limit to the amount of pressurization that can be afforded, and therefore no limit to a pilot's ceiling, except that engineering difficulties have so far not permitted the realization of this ideal situation. Cabin pressurization has a limit, and it is still necessary in addition to the pressurization to use oxygen at extreme altitudes.

It is a curious thing that with the solution of one problem there is frequently introduced another, and this is actually the case in connection with cabin pressurization. The question arose as to what would happen to a pilot flying at a very high altitude if his pressurized cabin were struck by a missile and he suddenly found himself in the reduced atmospheric pressure normally found at his particular altitude. The answer to that was simple, for if he were high enough and stayed there long enough he would be dead, and so it became obvious that some means need be provided the pilot to protect him from the effects of the sudden loss of cabin pressure, which, incidentally, we have termed "explosive decompression." I must say that in the minds of some individuals this is a rather academic question, because they contend that should a missile strike an airplane traveling at extremely high speed the plane would disintegrate and there would be little chance of saving the pilot. However, a more optimistic attitude has resulted in the development of a suit which automatically becomes pressurized when cabin pressure is lost, and which, together with the provision of a sufficient supply of oxygen, enables the pilot to descend by parachute or free fall to a level at which life can be supported by the oxygen in the ambient air.

It is needless to say that without the pressurized cabin and oxygen the altitude of 79,000 feet could not have been reached, and it is equally needless to say that the morale of the pilot at that altitude would not be what it is were he not provided with a satisfactory safety device.

There is another problem of considerable magnitude and of growing importance in this era of increasing speed. This has to do with the effects of acceleration on the human body. As far as linear acceleration is concerned this presently has not constituted a real problem, since the force applied even in accelerated take-offs, such as a catapult shot, are not of large proportions. With the possible development of rocket flight or atomic-powered airplanes it is probable that linear acceleration will be of increasing importance, but at the present moment we are more concerned with protection against deceleration than we are against linear acceleration.

A good deal of work, incidentally, is being done in the field of deceleration with the perfectly obvious intent of lessening the number of fatal crashes. The Air Force has been particularly active in this field of research, and although some of the results have been published, a great deal of the work is still classified and therefore not discussable. It is of interest that all people directly concerned with the saving of lives in airplane crashes are unanimous in the opinion that backward facing seats in commercial aircraft would markedly decrease the mortality in crashes, and as a matter of fact this has been demonstrated in several instances in Europe where the aircraft operators have been induced to install such unorthodox seating arrangements.

Radial acceleration, the common centrifuge force, is a matter of concern at the present moment and a great deal of work is being done to determine the basic physiology involved and to provide the pilot with a means of resisting the effects of the applied force. In discussing acceleration we have devised a formula which is based on the force of gravity and the units of our acceleration are known as "G's."

Standing here on the earth's surface I am subjected to the normal gravitational attraction, and the force exerted on my body has a value of 1 G. The same force is exerted when I sit in the pilot's seat of an aircraft flying straight and level, but the moment that I deviate from a straight course and enter a turn, additional forces are applied depending upon the velocity of the airplane and the radius of the turn.

In constructing an airplane full consideration is given to the fact that in maneuvering, the aircraft is subjected to stresses which well exceed 1 G, and the wings and fusilage must be strengthened to a predetermined degree. By that I mean that the wings of the aircraft are built in such a way as to safely permit the application, for example, of 6, 7 or 8 times the force of gravity, whichever may have been the predetermined stress limit. In most instances the airplane can withstand much greater stresses in the form of G than can the human body, although the effects of G on the human body are functions of both degree and time. For example, the normal individual may be able to stand 4½ times the stress of gravity, or 4½ G for a definite period, let us say a matter of minutes, whereas he would not be able to retain consciousness with 3 G if exposed for a longer period.

Actually, in the ejection seats of which you probably have heard, the individual ejected is subjected to from 16 to 20 G, but only for a period of a fraction of a second. Usually there are no harmful effects to an individual from his ejection if he is properly positioned, but there have been many instances in which injuries have been received, although these injuries were unquestionably preferable to the possibly more severe ones which would have been received had the individual been exposed to the deceleration incident to the crashing of his airplane.

Even before World War II it became obvious that the full potentialities of our fighter planes, that is, their rapid maneuvering ability, could not be utilized unless the pilots themselves were enabled to withstand more G's than was possible without aid. The result of a great deal of research on the part of many people was the development of a cover-all type of garment known as the "zoot suit" which contained rubber bladders around the legs and the abdomen which were automatically pressurized when the G forces in the plane began to exceed 1 G. The pressure exerted by the bladders prevented pooling of the blood in the lower extremities and the blood vessels of the abdomen, and helped maintain the cerebral circulation, the lack of which, of course, is the cause of the so-called "black-out." We have been able to increase an individual's G tolerance, but we have not increased it sufficiently to give adequate protection in flying the faster type planes.

The fact of the matter is that the faster the plane the longer the radius of the turn must be and therefore the longer the time of application of G forces on the pilot. Human limitations in this respect have not been completely determined, but work in this field is progressing fairly rapidly.

The original research into the physiologic effects of acceleration was done on so-called human centrifuges at Toronto and Rochester, Minnesota, Wright Field, and several other places. All of these centrifuges, however, were relatively small and in their operation produced forces which are not present in the airplane. In order to eliminate these extraneous forces and to provide a means of investigating the combined effects of high altitude and acceleration there has been constructed at the Naval Air Experimental Station at Johnsville a human centrifuge which is unique not only in that it is the largest in the world but also in that it embodies new principles in its construction. This centrifuge has a 50-foot arm, at the end of which there is mounted a car or gondola which can be used as a low-pressure chamber if so desired. Fifty feet doesn't sound like a very great distance, but I can assure you that when you stand in the pit and look at the instrument it is very definitely tremendous.

The centrifuge is rotated by a 4,000 horsepower motor, weighing 185 tons, and is capable of accelerations of from 1 G to 40 G's and a maximum rate of change of 10 G's per second. At its maximum rate of speed the gondola or low pressure chamber at the end of the arm is traveling at the rate of about 180 miles an hour. To make this rate of acceleration more understandable, but at the risk of oversimplification, it can be compared to that of an automobile which from a standing start reaches a speed of 180 miles an hour in 6.5 seconds.

There is an extremely complicated control system which provides a large amount of flexibility of operation, and there are electric pick-ups provided for measuring respiration, heart rate and reactions to external stimuli, as well as an electrocardiograph and electroencephalograph which can be operated during the application of G to the subject. The complexity of this device and its not inconsiderable cost are indices of the importance to aviation of the question of human acceleration.

The approach of the speed of aircraft to the speed of sound brought about some interesting speculation as to what would happen to a pilot if and when aircraft could fly faster than the speed of sound. The passage through the sonic barrier was regarded with some apprehension, not the least of which was a possible distortion of vision as the result of the production in wind tunnels, at least, of a visible shock wave. We expected the pilot to be subjected to severe buffeting, and of course nothing was known as to the effect on the physiologic processes. So far our fears have not been realized. There has been no visual problem as far as distortion goes, and we have not been able to determine the existence of any pathologic changes in people who have exceeded the speed of sound.

We are still very curious to know just what actually does go on, but all the planes which up to date have crossed the sonic barrier have been single place planes and have not permitted any direct observations. Of course, the time eventually will come when multiplace planes will fly faster than sound and will permit our flight surgeons to go more deeply into this question, but in the meantime we are endeavoring to develop instruments which will electronically pick up physiologic responses and telemeter those responses to instruments on the ground. The successful development of this project is a matter of the immediate future, and some data have already been acquired in this process of air to ground pick-up.

As I have said, we once looked with askance on the possibility of flying faster than sound, but that is a thing already accomplished. Today, we are thinking of the development of planes which will reach the moon or the other planets. It may interest you to know that the Aero Medical Association has authorized the formation of a space medicine branch which is concerned with interplanetary travel, a seeming impossibility which I am certain will eventually be realized. I am very much heartened to note that the comic strips which first introduced such people as Buck Rogers and his rockets confirm my opinion, since there is now at least one strip devoted entirely to space travel and adventure.

I realize very keenly that these remarks of mine relative to medical participation in the development of aviation have been, to say the least, somewhat sketchy. The subject is indeed a broad one and I have included only a very few of the contributions which medical men have made.

The field of research in aviation medicine still presents many challenging problems, and it is but one of the many fields in which research can produce results. It is not my intention to convert any of you or to divert any of you from the accomplishment of your present ambitions. I merely call to your attention the fact that there are many fields other than the hospital in which you can contribute to the advancement of the human race.

In this dedication of yourselves to the science of medicine I wish you all good luck, and whether you become general practitioners, internists, surgeons, or what not, I feel sure you will so conduct yourselves as to enhance in the eyes of the laity the esteem in which the medical profession is now held.

President's Page

ARE DOCTORS 'AGIN' EVERYTHING?

Very likely you, as well as I, have heard this question propounded by the laity. I heard it again just recently, with 'appropriate epithets', from the lips of the Chairman of the Board of one of our large hospitals, a man who by now should know the reasons for medicine's position.

Medicine has only one theme—what's best for the people. And that is what the people find it hard to believe. The socialists are clever enough to make it appear that what they propose is so altruistic that anyone who objects must be a devil indeed. And, unfortunately, our people have been taught over the past 20 years that the "world" owes them almost everything, the "world" being the Federal Government. The Government is looked upon by many as a paternalistic Midas whose limitless wealth comes from some mystic source. Perpetuation of this thought and its acceptance by the majority of the people would in time relieve them of their freedoms and destroy in them all sense of responsibility for their own welfare.

There are just two criteria for the opposition by organized medicine of any proposal based on the assumption that it would "assure adequate medical care for all." These are (1) that Government control of the practice of medicine and provision for medical care be strictly excluded, and (2) that free choice of physician by the patient be preserved. Most proposals thus far have not fulfilled these criteria—hence medicine's opposition, and hence the idea that "doctors are agin everything."

Unfortunately, the American Medical Association was slow to accept the fact that something had to be done about the high cost of medical care. It took years to get our parent organization to accept the principle of voluntary prepaid medical insurance. Once it did so, the movement grew rapidly, but not rapidly enough to quell the left-wingers. We have a temporary respite in the coming to power of a new administration, but we must never forget that the left-wingers are still a potent force even though at present they are in the minority.

The current proposals of the President's Commission on the Health Needs of the Nation, a nonpolitical agency, has been received with great interest, albeit by medicine with some misgiving. This report must be studied with great care, something which the average citizen will not do. It will take time and great discernment to ferret out all the political implications of the tremendous document. In an editorial in the *Chicago Sunday Tribune* of December 21, 1952, entitled "Political Medicine," some of the objectionable features of the recommendations were pointed out. To quote in part:

> "To appraise this (the existing) system of medical care and reach the conclusion that it calls for improvements which can only be achieved by Federal intervention and the spending of taxpayers' billions is no exercise in logic. It calls for some pretty fancy emotionalism. . . . Local governments throughout the country already provide free medical care for citizens unable to pay for it. The citizen who can pay part of the cost of his care, but not the full amount, can also get treatment in a public hospital, paying what he is able. The Commission's proposal would merely duplicate an existing service. It would transfer part of the cost to the Federal Government, which means only that the solvent citizen would pay a slightly smaller local tax, perhaps, but would surely have his Federal income tax boosted. . . . Originally the government (of Great Britain) supplied 'free' medical service to persons with incomes below a certain figure. Eventually the socialists forced everyone into the system. They got free medical care, of a sort, but they paid for it in their tax bills and they got such medical care, on such terms, as the politicians dictated. . . . The current report is simply an attempt to revive this scheme (proposed by Mr. Truman for the United States) on the Fabian basis."

Space will not permit fuller discussion of the report. I can only hope that before final judgment is made by those responsible for its acceptance or rejection, in whole or in part, it will be thoroughly studied and carefully evaluated.

Wallace M. Yater

Editorials

THE MIDWINTER SEMINAR: MEDICAL "CRUSADE"

The Medical Society of the District of Columbia is engaged once again in one of its annual medical "crusades." We refer, naturally, to the Midwinter Medical Seminar which will be held this year on March 17, 18 and 19, 1953, from 8 to 10 p.m. in the Medical Society's building. To apply the pseudohieratic term "crusade" to a medical meeting is to endow such a prosaic effort with a transcendental aura. No such sacerdotal intent is implied in the present instance. According to Webster, our favorite lexicographer, a crusade may be "any remedial enterprise undertaken with zeal and enthusiasm." This explanation illustrates precisely the exact meaning which we have in mind. By using the term crusade we wish merely to emphasize the benevolent and "remedial" character of this medical meeting.

The continuing and unending efforts which the Medical Society has always made in its purpose to disseminate and propagate scientific knowledge should be elucidated in their proper perspective. The medical profession, humble in its scientific acquisitions and sage in its human limitations, would be the first to look askance at the appellation "crusade" to its traditional educational efforts. However, when we perceive what is transpiring today in various parts of the world, where the forces of ignorance and intolerance are gathering their Paleozoic clans to join atomic battle with the defenders of freedom, we should not hesitate to interpret properly our humanistic endeavors. When we are examining and exchanging scientific knowledge and experimental observations with our colleagues everywhere, we are dedicated in a "crusade" for the scientific spirit. When we are utilizing our therapeutic drugs and mechanical contrivances for the alleviation of human suffering, we are engaged in a "crusade" for the salvation of the human body. When we are analyzing and subcortically probing the mental faculties of the human race, we are striving in a "crusade" for the liberation of the human soul. In these and other similar ways the followers of Hippocrates carry on their medical "crusades."

Consequently, when the District Medical Society invites you to join with your medical colleagues in taking part in the Midwinter Seminar, come with "zeal and enthusiasm." The Program Committee has tried to steer a course in its selection of material midway "between the granite-faced Scylla of purely utilitarian dogma and the Charybdian vortex of ultra-scientific research." The speakers will be composed entirely of local, well-known research investigators and medical clinicians. A question period at the end of each lecture will provide the audience with an opportunity to dislodge the authorities from their lofty pedestals, if the audience so desires. For the free exercise of your dialectic faculties without any regard for materialistic philosophies, come to the Midwinter Seminar, March 17, 18 and 19, at 8:10 p.m. each evening, at the District Medical Society's building.

Peter D. Comanduras, M.D.
Member, Program Committee

Opinions expressed in contributions to the Editorial Section are those of the writers and do not necessarily reflect the views of The Medical Society of the District of Columbia

Second Midwinter Seminar

OF

THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA

March 17, 18 and 19, 1953

MEDICAL SOCIETY BUILDING   1718 M Street, N.W.

TUESDAY, MARCH 17—EVENING SESSION

8:00 MENOPAUSE

Henry L. Darner, M.D.

Clinical Professor of Obstetrics and Gynecology, George Washington University School of Medicine

8:20 ALCOHOLISM

Anthony Zappala, M.D.

Clinical Instructor in Psychiatry, Georgetown University School of Medicine

8:40 SELECTION OF PATIENTS FOR PSYCHOANALYSIS

Marvin L. Adland, M.D.

Chestnut Lodge, Rockville, Md.

9:00 PANEL DISCUSSION ON DIABETES

Russell M. Wilder, M.D., ***Moderator***

Director, National Institute of Arthritis and Metabolic Diseases, National Institutes of Health

DISCUSSANTS:

Louis K. Alpert, M.D.

Clinical Adjunct Professor of Medicine, Georgetown University School of Medicine

Samuel P. Bessman, M.D.

Associate in Pediatrics, George Washington University School of Medicine

Laurence H. Kyle, M.D.

Assistant Professor of Medicine, Georgetown University School of Medicine

J. Lawn Thompson, Jr., M.D.

Clinical Assistant Professor of Medicine, Georgetown University School of Medicine

WEDNESDAY, MARCH 18—EVENING SESSION

8:00 PEDIATRIC ALLERGY

Roland B. Scott, M.D.

Professor and Head of the Department of Pediatrics, Howard University School of Medicine

8:20 BURNS

Robert E. Moran, M.D.

Washington

8:40 THE MANAGEMENT OF ESSENTIAL HYPERTENSION

John M. Evans, M.D.

Assistant Clinical Professor of Medicine, George Washington University School of Medicine

9:00 PANEL ON CARDIAC EMERGENCIES

Clayton B. Ethridge, M.D., ***Moderator***

Clinical Professor of Medicine, George Washington University School of Medicine

DISCUSSANTS:

William E. Bageant, M.D.

Clinical Instructor in Anesthesiology, George Washington University School of Medicine

Joseph M. Barker, M.D.

Clinical Assistant Professor of Medicine, Georgetown University School of Medicine

W. Proctor Harvey, M.D.

Instructor in Medicine, Georgetown University School of Medicine

William L. Howell, M.D.

Clinical Assistant Professor of Medicine, Georgetown University School of Medicine

THURSDAY, MARCH 19—EVENING SESSION

8:00 Panel on Drug Therapy and Rheumatoid Arthritis

Hugh H. Hussey, M.D., ***Moderator***

Associate Professor of Medicine, Georgetown University School of Medicine

Discussants:

Thomas McPherson Brown, M.D.

Professor of Medicine, George Washington University School of Medicine

Joseph Bunim, M.D.

Assistant Professor of Clinical Medicine, New York University College of Medicine

Darrell C. Crain, M.D.

Clinical Assistant Professor of Medicine, Georgetown University School of Medicine

Walter K. Myers, M.D.

Assistant Clinical Professor of Medicine, George Washington University School of Medicine

9:00 Clinical Pathological Conference

Harold J. Jeghers, M.D., ***Moderator***

Professor of Medicine and Director of the Department of Medicine, Georgetown University School of Medicine

Participants:

Theodore Abernethy, M.D.

Assistant Clinical Professor of Medicine, George Washington University School of Medicine

Captain E. S. Evans, MC, USN

Chief of Medicine, Naval Medical Center

Colonel Paul Fancher, MC, USA

Chief of Medicine, Walter Reed Army Hospital

John Minor, M.D.

Associate in Medicine, George Washington University School of Medicine

SOCIAL HOUR AND REFRESHMENTS IN THE LIBRARY WILL FOLLOW THIS FINAL SESSION

Patients Are People

A SYMPOSIUM FOR THE DOCTORS' OFFICE STAFFS

MEDICAL SOCIETY AUDITORIUM 1718 M Street, N.W.

March 16, 1953—8:00 P.M.

Moderator: THEODORE WIPRUD
Secretary, The Medical Society of the District of Columbia

"Greeting the Patient"

JOSEPHINE RENSHAW, M.D.
Chairman, Committee on Public Relations
The Medical Society of the District of Columbia

"Telephone Conversations"

GEORGE W. EISENACHER
Manager, The Chesapeake and Potomac Telephone Company

"Problems in Ethics"

ZIGMOND M. LEBENSOHN, M.D.
Vice Chairman, Committee on Public Relations
The Medical Society of the District of Columbia

"Patients' Accounts"

ROBERT U. COOPER, M.D.
Member, Committee on Group Insurance
The Medical Society of the District of Columbia

JOHN C. POST
Professional Business Services

**"The Blue Shield—
Its Significance to Doctors and Patients"**

GEORGE B. MCGOVERN
Manager, Medical Service of the District of Columbia

"Common Complaints"

HERBERT P. RAMSEY, M.D.
President-elect, The Medical Society of the District of Columbia

BUFFET SUPPER

ALL THOSE WHO PARTICIPATE IN THE SYMPOSIUM ARE INVITED TO STAY FOR A SOCIAL HOUR

Registration Fee (*Supper Included*) $1.00

PATIENTS ARE PEOPLE

This is the title of a symposium being sponsored by the District Medical Society on March 16 at 8 o'clock in the Medical Society's auditorium. It is intended primarily for those whose work in doctors' offices brings them in contact with patients. It is in no sense an innovation, inasmuch as a similar program was successfully presented here several years ago. On that occasion there was excellent attendance, even though the night was a particularly stormy one. Because of the success of that program, plus the fact that many now working in doctors' offices are new since then, it seems advisable to offer a similar program this year.

The importance of human relations is being increasingly recognized in business, industry, and the professions. Among the leading exponents of this approach to modern living is the medical profession. The existence of Public Information and Grievance committees of our Medical Society is evidence of the doctors' desire for harmony and understanding between doctor and patient. But the doctors are not alone responsible for the attitude of patients toward the medical profession. Receptionists, nurses, and laboratory technicians all have many opportunities to ease the minds of troubled patients. Illness, even of a minor nature, can make normally stable individuals irritable and unreasonable. They need kindness, comfort and understanding, as well as good scientific care. This is where the doctor's office staff can be invaluable. No doctor should be satisfied with his office staff simply because they handle the technical part of their jobs well. He should insist too on kind and courteous attention to the patients.

Among the subjects to be discussed at the symposium on March 16 are: greeting the patient, telephone conversations, patients' accounts, and common complaints. Following the general program there will be refreshments and time for members of the audience to get acquainted with each other. More detailed information will be sent to members of the Society later.

Meanwhile, doctor, you might advise your staff to save the evening of March 16 for an interesting program in the Medical Society's auditorium.

Josephine E. Renshaw, M.D.
Chairman, Committee on Public Relations

HOW NOT TO GET NARCOTICS

Ways and means for improving relations between pharmacists and physicians are always in order. At the present time one improvement of great value can be easily effected.

The Federal Bureau of Narcotics has reason to believe that many physicians are getting their narcotics for use in their office and home calls from pharmacists and is planning to clamp down on this method of acquiring narcotics. For example, in one Bureau district there are 4,000 physicians with narcotics registrations, but only 169 "official" order books were issued in a year (*FDC Drug Letter*, November 3, 1952).

Violating physicians obtain their narcotics for offices or bag use by writing ℞ for bona fide patients. Sometimes, perhaps, the druggist complies with the physician's illegal request under duress of losing the physician's business.

This method of obtaining narcotics is illegal. When narcotics are obtained in this manner, the physician is guilty of possessing narcotics which he is not entitled to. He places himself in the same position as any legal offender in this matter. At the same time he places the druggist in the position of violating the narcotics laws. In addition, the physician adds to his bookkeeping burden by confusing his own narcotics inventory.

We know that most physicians and pharmacists are law-abiding. It is merely laziness or failure of the physician to understand the ramifications of the narcotics laws which leads to violations.

It is very simple to obtain narcotics for legal purposes. One has only to fill out the Federal narcotics blank and order narcotics from a wholesaler. If this is done, no legal questions can arise. The violations as they now stand make both the druggist and physician legal offenders.

The discontinuance of this violation will save many physicians and pharmacists from possible prosecution or loss of license to practice. At the same time there would be immeasurable improvement in professional relations between physicians and pharmacists.

Samuel Benjamin, M.D.

THE MEXICAN SURGICAL ASSEMBLY

The Mexican Assembly of Surgeons meets every two years in Mexico City. This is an occasion that calls for an outburst of Latin enthusiasm and hospitality. More than 60 foreign guests were invited last November, about half of them from north of the border, and the rest from Europe and the Latin American countries. The visitors were made welcome in the Palace of the Fine Arts, in the City Hall, in the Foreign Office, and in private homes. They were treated to superb Mexican cuisine and entertained at a special spectacle at the Televicentro stressing folk songs, dances, and costumes. A bull fight with doctors as *toreros* was a special feature.

The scientific work of the Assembly was centered at the Juarez Hospital, an old structure of stone and stucco, with equipment in various stages of development, from the primitive to the advanced. Exhibits, technical, scientific and artistic, were placed strategically so as to attract the large number of doctors in attendance. Trips were arranged to various points of interest, such as University City, the Shrine of Guadalupe, the Military Hospital, the Pyramids, and to the attractive towns such as Cuernavaca and Puebla.

Mexico City is high enough to be cool and the people are lively and full of enthusiasm. They may knock off for a siesta in the afternoon, but they work late in the evening and may start dinner anytime from nine to midnight. The program of the Assembly was correspondingly intensive, often lasting through the afternoon until 7 or 8 p.m. "P.m.", by the way, is sometimes translated as *punctualidad mexicana*, which has some relationship to the philosophy of *mañana*.

The Assembly divided itself into half a dozen sections for orthopedics, nursing, neurologic surgery and others, with plenary sessions frequent enough to allow the spectators to see and hear some of the legendary personalities of present-day surgery. Photographers outdid themselves, often distracting not only the audience but also the speakers with floodlights and flash bulbs. The "distinguished visitors" were offered opportunities for obtaining an unlimited number of souvenirs in the form of photographs, clippings, medals, diplomas and special mementoes of one sort and another.

As in any large congress, the resemblance to a three-ring circus was notable. Usually the guest's attention was limited to a very small proportion of the whole show. More actual information was transmitted in the small intimate gatherings in private homes and at special luncheons in restaurants. There the guests rubbed shoulders with their hosts and could drop the formalities of the major presentations.

The greatest impact of the Assembly was upon the younger doctors of Mexico. Their interest was aroused and they came in droves. Some were fresh from their medical studies; others had put in their year's service in the small villages back in the mountains or down in the jungles. They came to the Assembly to see and to listen to the speakers, many of whom were only names on the tongues of their professors, or beneath the titles of scientific articles written in unfamiliar languages. One could sense among these young men and women a thirst for knowledge and a desire to learn from their own countrymen as well as from the visitors, but more especially a desire to catch and keep a certain profile, a gesture, or a manner of speaking that would stamp in their memories the imprint of the individual. We can imagine the young doctor returning to his home town and reporting his experiences: "Yes, I saw Leriche, the great French surgeon. I thought he would be tall and thin, but he's not. He's a jolly, tubby little man with a fringe of gray-blond hair. And he speaks with his hands."

WALTER FREEMAN, M.D.

In and Out of Focus

BY THE OBSERVER

Dr. Christie Honored

In the whirl of social activities so characteristic of Washington, there are few occasions which deserve the appellation "memorable." But the dinner given in honor of Dr. Arthur Carlisle Christie at the Shoreham Hotel on December 20 is certainly in this category. In fact, a number of physicians who attended the dinner have since told your Observer that it was an extraordinary event they will long remember.

Although he was "master of ceremonies," your Observer's role was a comparatively minor one. He does not hesitate to state, therefore, that to him also the dinner was a unique occasion. Banquets have long since ceased to be a novelty to him, but this one was different. The purpose for which it was given and the ingredients that went into it set it apart from all the others.

Fortunately, it had been proposed by a member of the committee on arrangements, which consisted of Mr. Robert L. Lefevre, Dr. Ralph M. Caulk and your Observer, that instead of following the usual pattern of speechmaking at dinners, talks be interspersed between courses. This, it turned out, was an excellent suggestion and probably did as much as anything to make the event a lively one. Then, too, the talks were brief and of uniform excellence. In these circumstances, it was not too surprising that the program was received throughout with close attention.

The evening came to a close in a most unusual and satisfying manner. Most of those present came forward following the benediction to shake Dr. Christie's hand and wish him good luck. It was a most unusual tribute to one of Washington's finest physicians and best-loved citizens.

The dinner was given by Dr. Christie's friends in the medical profession and the Rotary Club of Washington in recognition of his 50 years of distinguished service to his profession and to the community. It was attended by some 200 prominent physicians and laymen, not a few from distant places.

At the speaker's table were:

Major General George E. Armstrong, Surgeon General of the Army

Vice Admiral Joel T. Boone, Chief Medical Director of Veterans Administration
The Right Reverend John K. Cartwright, Rector of St. Matthew's Cathedral
Dr. Arthur C. Christie
Dr. Leslie Merle Christie
Dr. William D. Coolidge
The Honorable F. Joseph Donahue, President of the Board of Commissioners of the District of Columbia
Major General Silas B. Hays, Deputy Surgeon General of the Army
Maurice K. Heartfield, President of the Rotary Club of Washington
Dr. Edward G. Latch, Pastor of the Metropolitan Memorial Methodist Church
Dr. Henry C. Macatee
Dr. Benjamin H. Orndoff, Head of the Department of Radiology at Loyola University
Philip M. Talbot, Vice President of Woodward & Lothrop
Dr. Leonard A. Scheele, Surgeon General of the United States Public Health Service
Dr. Wallace M. Yater, President of the Medical Society of the District of Columbia
Theodore Wiprud

The program opened with the reading of congratulatory messages from the Honorable Frank Pace, Jr., Secretary of the Army, and William C. Stronach, Executive Secretary of the American College of Radiology.

Major General Armstrong was the first speaker. Unfortunately, his remarks and those of Dr. Macatee were extemporaneous and therefore not available to your Observer at the time this was written. However, Dr. Christie loaned your Observer the texts of talks made by the others from which he has extracted what he considers the most significant comments about the guest of honor:

MR. DONAHUE: "Dr. Christie may be truly called a civic leader, as well as a leader among physicians. . . . While serving as President of the Medical Society of the District of Columbia, 1931–32, his Presidential address contained much timely advice to the general practitioner, so timely that even today some of the remarks are most pertinent: 'We are living in a day of rapidly changing conditions. Science with its new discoveries has brought to light a great body of new truth, and inventive genius has produced a new technology. . . . Many of our present-day problems are due to maladjustment to rapidly changing social and economic conditions.' Today, 20 years after that speech, the ideals he set forth are still achievements to be attained. Without question, these remarks have influenced and inspired many physicians in this city to help our civilian population meet and overcome the problems of maladjustment due to rapidly changing social and economic conditions."

DR. YATER: "My job is to remind you of some of Dr. Christie's organizational activities and to point out the tremendous industriousness and diversity of interests of a great physician. I was never more frustrated in my life because of the short time available to do justice to the subject. . . .

"His Presidential Address was entitled 'The Problems of the General Practitioner,' an address so full of wisdom that we published it in 1950 because the philosophy expressed was so amply justified 18 years later.

"From then on Dr. Christie was one of the leaders in our fight against the socialization of medicine. He saw clearly that what was happening abroad might well take place in this country. He was instrumental in awakening the AMA and the medical profession to the necessity of finding a solution that would circumvent the Government control of medicine. He took a leading part in establishing the Medical-Dental Service Bureau and the Central Admitting Bureau for Hospitals (now the Hospital Service Agency) and was an officer and director of both. He helped establish Group Hospitalization and was a member of its Board of Trustees for years.

"Dr. Christie was a member of that historic Committee on the Costs of Medical Care and sponsored the first minority report.

"He was a member and chairman of various committees of the Society, including the important Committee on Medical Economics and the Executive Committee.

"In 1935 he published a book entitled the 'Economic Problems of Medicine,' which was widely read. I quote from one of the reviews of the book to give you an idea of its scope: 'Christie has applied a well-trained mind to the study of the various economic problems that affect the medical profession, including health insurance; industrial medicine; the new methods of medicine under trial and recommended by medical organizations; and state medicine as practiced in Germany, England, France and Denmark. He discusses not only the objectionable types of medical practice, but also gives those which are recognized and approved by the American Medical Association; and finally offers a solution to the problems of medical care. Physicians, individually and collectively, should be grateful to Dr. Christie for his medical statesmanship as exemplified in his efforts to uphold high standards of ethics and medical practice.'

"Dr. Christie was an Alternate Delegate of the Society to the AMA for many years.

"In 1948 the Society presented him with its Certificate for Meritorious Service.

"Numerous articles came from his pen. I mention only a few that have appeared in the MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA:

'The Care of the Veteran,' 1932
'Greater National Capital Committee,' 1932
'Who Is Responsible for the Medical Care of the People?' 1938
'Medicine in the Nation's Capital 1817–1942,' 1942
'Some Medical Lessons of the Mobilization,' 1944
'Medical Ethics: Theory and Practice,' 1948

"With all these and many other activities in the Society, Dr. Christie not only engaged in an active practice of radiology, of which he was a pioneer and master, but he wrote books and numerous articles on the subject; he was a professor of radiology in both of our medical schools; he lectured on medical socioeconomics; he was active in the Board of Trade; he was a leader in the first chest X-ray survey in the District; he was consultant to the U. S. Public Health Service, to the Veterans Administration, to the Army Medical Corps, and to the National Research Council. He helped establish the Specialty Board of Radiology. He was active in national and international X-ray organizations and editor of the *National Journal of Radiology*.

"Dr. Christie has received many honors and degrees, and has delivered numerous memorial lectures.

"In addition to all these things, he has found time to be active in church, civic and educational matters, having been President of the Y.M.C.A. and Chairman of the Board of Directors of American University.

"To give you an idea of the tempo of the doctor's life and the diversity of his activities, I shall give you his calendar for a few days in October of 1935:

October 7–8: Kansas City
Southwestern Clinical Society: 'Diagnosis and Treatment of Carcinoma of the Breast'
Joint County Medical Society: 'The Washington Plan'
The Coöperative Club of Kansas City: Address on general public health
October 15: Norfolk
Virginia State Medical Society: 'The Answer of the Medical Profession to State Medicine'
October 17: Detroit
International Postgraduate Assembly of North America: 'The Diagnosis and Treatment of Cancer of the Lip, Mouth and Throat'
October 28–29: Omaha
Omaha Clinical Society: 'Cancer of the Lip, Mouth and Throat'; 'Diagnosis and Treatment of Bronchiectasis'; also 4 separate addresses on medical economics

DR. COOLIDGE ADDRESSES DR. CHRISTIE

World-famed DR. WILLIAM D. COOLIDGE is shown here addressing his opening remarks to DR. ARTHUR C. CHRISTIE (left). Next to Dr. Christie is THEODORE WIPRUD, and at the far right is DR. BENJAMIN H. ORNDOFF of Chicago.

"These are just some of the things Dr. Christie has done, but what one man could have done more?

"Dr. Christie, as you listen to these words, don't you yourself wonder that you could really have done all these things?"

DR. COOLIDGE: "Although the physical apparatus for producing X-rays had been greatly improved over that first used by Professor Roentgen, its control still left much to be desired. As a result, it was difficult in radiography to get the desired amount of contrast and, at the same time, the right exposure. This lack of control was rendered the more serious by the fact that X-rays in sufficient dosage were destructive of human tissue, and that some of the most dangerous effects might not appear for as much as several years after exposure. Furthermore, some of the medical uses required, even under best conditions, an exposure of the patient to an appreciable fraction of the limiting safe amount. Not only

COLLECTION OF LETTERS PRESENTED DR. CHRISTIE

Dr. William J. Tobin (right) presents Dr. Arthur C. Christie a bound volume of letters from friends in all parts of the world expressing their admiration and extending best wishes to him upon his retirement.

CAT.

was it difficult to reproduce a given kind of X-radiation, but there was no good device for measuring either the kind or the quantity factor. Moreover, it was not alone the patient who was in danger. Many of the earliest X-ray workers had been seriously injured—and some fatally—by too much exposure to the rays.

"In looking back to that time, I am impressed also by the amount of educational work that was still required to be done by the specialist in selling this new diagnostic and therapeutic agent to the rest of the medical profession. The difficulty of dealing with the equipment of that day was such that, for good results, much of the time and energy of the specialist had to be devoted to the purely technical side of the work, leaving but little time over for the medical aspects. This made it imperative for the radiologist to develop technicians—and these technicians had to be good if the quality of the work was to be such as to really benefit the patient. A poor radiograph, for example, could easily work to the disadvantage of the patient by leading to a wrong diagnosis. Dr. Christie had the courage to take up this specialty and wrestle with its technical difficulties. Through the years he has also, as the record eloquently testifies, taken a very active interest in all phases of the necessary educational effort. Both by publication of his own scientific work and by helpful public discussion of the work of others, he has given us, and future generations, the full benefit of his wide experience. . . .

"Dr. Christie, as one of the many who have been privileged to work on the development of the tools of the radiological art, allow me to express my appreciation of your great and many-sided contribution to making such tools useful to humanity."

Dr. Orndoff: ". . . I want you to know how I have been thrilled with pride to see the name of the man we are here to honor, Dr. Arthur Carlisle Christie, inscribed on metal plaques and on documents which denote the loftiest positions accorded radiologists and physicians. They appear not only in our own country, but in Ireland, the British Isles, countries of Europe, South America, and throughout the world. His loyal friends in these countries are legion. . . ."

Mr. Talbot: "His distinguished service in the fields of medicine, science, religion, charitable and civic work has contributed substantially to a better city and a better Nation—in fact, ours is a better world because of him, and we are deeply grateful for the many contributions he has made to the worthwhile things in life. . . ."

Dr. William J. Tobin, in his usual friendly and informal manner, presented Dr. Christie with a leather-bound volume of letters from his friends all over the world.

Dr. Christie accepted the gift with thanks and responded to the encomiums with characteristic modesty:

"I am grateful to the speakers for their skill and discrimination in choosing from my record the matters about which they could speak favorably. It would be ungrateful on my part if I should try to hide behind false modesty and attempt to depreciate the esteem which your presence here seems to convey. The approval of one's fellows is a legitimate ambition of every right-minded person, and in that light I am bold enough to accept the compliments of this occasion."

He then enlarged upon his views on science and religion in a most impressive and stirring manner. For the benefit of those who could not be present at the dinner, his remarks have been published in full elsewhere in this issue of the Medical Annals.

An interesting sidelight on the dinner was the arrangements made for Mrs. Christie and a few of her friends to listen to the proceedings in the West Ballroom from a small dining room on another floor of the Shoreham.

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Conference on Medical Care

"Something should be done to let the doctors know what they are up against," observed a prominent member of the Society at a committee meeting recently. He said his eyes had been opened at discussions which had been held with union leaders about the medical needs of their members.

"Doctors are living in a different world," he continued; "they need to learn the 'facts of life' about the changes now taking place in our society which will have tremendous influence on the future of private practice."

It may be that this doctor underestimates the knowledge of most doctors with respect to social trends affecting medicine; however, your Observer doubts it, because in his talks with doctors he has found that even some who have been active in their medical organizations are surprisingly uninformed. More disturbing, they are not particularly interested. They would rather have somebody else look after their interests in such matters.

This indifference toward what may well be vitally important to every physician has disturbed medical leaders for a long time. They and those who work with them in administrative capacities have endeavored to discover a satisfactory manner of getting physicians generally to absorb information of this sort. Inevitably, the question arises, which is the best medium through which to reach reluctant physicians, the printed or the spoken word?

At the present time most physicians are inundated with printed material. Most of it finds its way to the wastebasket. Articles on every phase of medical care appear quite regularly in medical journals. It is your Observer's hope that these are widely read, but he has a feeling that the impression they leave is fleeting.

If every physician could serve on a committee of his medical organization dealing with current issues relating to medical care, much of the present apathy would vanish. Obviously, this is impractical.

The next best solution would seem to be open forums, in which authorities on various aspects of the subject would participate. Here there would be an opportunity to exchange views on such important topics as: The Blue Shield Movement—Its Significance to Physicians and Patients, Trends in Medical Legislation, Relations Between Hospitals and Physicians, Voluntary Health Insurance Plans—Will They Survive, and The Role of Government in Medicine. These are, of course, just a few of the many challenging facets of the medical care picture which might be discussed.

Following this line of thought, it occurred to your Observer that a conference on medical care might be productive of excellent results. Such a conference has been proposed to the Executive Board with the suggestion that not only members of the Society be invited to attend, but physicians belonging to medical societies in adjoining counties.

It seems to your Observer that a sizable number of physicians would take advantage of such an opportunity to familiarize themselves with broader problems of medical care.

Blue Shield versus Commercial Insurance

More than once your Observer has heard doctors express the hope that the commercial insurance companies would relieve the medical profession of the responsibility for medical prepayment plans. Whenever an opportunity offered, he has endeavored to impress upon physicians making such statements that this would not be in their best interests or that of their patients. Furthermore, that there can be no retreat from the position taken by organized medicine and the obligations it has assumed with respect to voluntary health insurance; and that if it should occur it would perhaps be an invitation to the Government to take over, regardless of the political complexion of the country at the moment.

He has also pointed out that the primary reason medical organizations entered the prepayment field was to provide their patients with a less burdensome method of paying their medical bills. Medical societies, he has observed, are not justified in sponsoring so-called indemnity plans where subscribers are reimbursed a specified amount for a given disability. That, he has insisted, is the logical field for the commercial insurance company. In making this statement, he has been cognizant that there are a number of medical societies still sponsoring indemnity plans and that most medical service plans indemnify in part. But, in his opinion, the goal of all these plans should be to provide medical service benefits only with as few restrictions as possible.

As to commercial insurance companies, doctors who favor supplanting the present efforts of the medical profession in the prepayment field might keep in mind that should these companies take over the voluntary health insurance program, the medical profession would not be in a particularly enviable position. In fact, regulation of doctors' services and fees either by the commercial insurance companies or the Government would be highly unsatisfactory to physicians and their patients.

James E. Bryan, Administrator of the Medical-Surgical Plan of New Jersey and one of your Observer's long-time friends, has written a splendid article on "The Medical Profession and the Blue Shield," which appeared in the October, 1952 issue of *GP*, official publication of the American Academy of General Practice, in which he deals with this matter with irrefutable logic:

> "If the commercial insurance industry takes over the management and underwriting of voluntary medical care insurance, then the control of the basic economy of American medical practice will have passed completely out of the hands of the medical profession.
>
> "At present, the alert interest of labor unions and of workers generally in the relative benefits they are purchasing (or that are being purchased for them as a result of labor-management contract negotiations) is favoring Blue Shield. To meet the consumers' demand for a superior product, leading commercial carriers have been forced to raise their levels of indemnity payments for professional services and to extend their scope of coverage. Parenthetically, this influence exerted by Blue Shield on its competitors is an inadvertent, but by no means unimportant, service rendered the profession and the public by these Plans.
>
> "On the other hand, one of the factors favoring the commercial carriers is the fact that it is often easier to sell a cheaper product than a better one, unless one is dealing with an alert and well informed buyer. If the commercial insurance industry can gain a dominating position in the health insurance field, it is logical to expect that the intense competition within the industry itself—for sales volume—will tend to depress their schedules of medical and surgical indemnities. This will either depress the average earnings of the profession per service rendered, or increase the burden of co-insurance on the subscriber, or both. In any event, the British experience has shown that the proliferation of a cheap and inadequate voluntary program serves only to create an undeniable public demand for governmental action. . . .
>
> "In all fairness, we must acknowledge that there are many highly enlightened, socially-minded people in the commercial insurance industry. Some of the larger companies offer excellent indemnity programs, and many are seeking to enter into service agreements with 'participating physicians,' similar to those of Blue Shield Plans. It would seem doubtful, however, that many physicians will be interested in 'participating' with strictly profit-making enterprises, since they will 'par-

ticipate' only on a unilateral basis—according to the company's terms. They will certainly not participate in the ultimate direction of company policies, as they do with respect to Blue Shield, both through direct representation on the directorates of the Plans and through their medical societies which work with the Plans in an advisory capacity.

"The commercial insurance industry, however, has no generally accepted national standards of performance comparable to those applied to Blue Cross and Blue Shield by their respective national commissions. A considerable proportion of commercial 'health and accident' insurance is underwritten by 'mail order' companies, working on a 20–50 per cent operating expense ratio. (This contrasts with Blue Shield's average operating expense ratio of 12–13 per cent.) Such companies may be licensed in only one or two states, but they operate by mail all over the country. Nearly every doctor has had some unhappy experience with the fine print and tricky clauses in the contracts offered by these 'cats and dogs' of the insurance industry, which have made numerous friends for the proponents of socialized medicine."

Mr. Bryan makes it clear that he is well aware of the shortcomings of Blue Shield Plans, but he says:

> ". . . Blue Shield as a whole is a useful and powerful instrument, which the profession cannot afford to ignore. . . . It may not have occurred to you, but if you are one of the 115,000 practitioners who are 'participating physicians' in one or another Blue Shield Plan, this relationship offers you the most important opportunity you have ever had to take part, concretely and consciously, in solving a national social problem. . . .
>
> The individual doctor is more than just a receiving agent for Blue Shield checks. He is a vital part of the show—indeed, he is the ultimate underwriter of the whole business. What this dynamic enterprise becomes in the future will largely depend upon the interest that each physician takes in it from this time on."

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"Bauer's Goals . . . Wear a Magnuson Complexion"

Despite the fact that he was one of the first to receive a copy of Volume One of the Report of the President's Commission on the Health Needs of the Nation, your Observer still had not found time to wade through it by mid-January, when these lines were written. He has had to content himself with reading the summary of the Committee's findings and its recommendations.

While the controversial compulsory insurance issue is not specifically mentioned, the Commission has a good deal to say about prepaid medicine. Its views on this subject are contained in the following recommendations:

> "1. The principle of prepaid medical insurance be accepted as the most feasible method of financing the costs of medical care.
>
> "2. The present prepayment plans be expanded to provide as much health service to as many people as they can; . . . and be aided by Government through allowing payroll deductions for governmental employees, releasing the restrictions on organization of prepayment plans, and promoting research on health service administration.
>
> "3. A coöperative Federal-state program be established to assist in the financing of personal health services. Under this program, a single state health authority would be set up in each participating state. Each state would draw up an over-all state plan for assisting in the development and distribution of personal health services for all persons, using public or private agencies or resources, or a combination of them. State plans would be developed in coöperation with local or regional authorities and would be linked with the planned expansion of health resources, so as to provide ultimately for more comprehensive, more efficient and more economical services. State plans would be expected to conform to certain Federal minimum standards and would be submitted to the Federal health agency for approval. Federal funds for the program might be derived from several different sources, as suggested below.
>
> "4. Funds collected through the OASI mechanism be utilized to purchase personal health service benefits on a prepayment basis for beneficiaries of that insurance group, under a plan which meets Federal standards and which does not involve a means test.
>
> "5. Federal grants-in-aid be made from general tax revenues for the purpose of assisting the states in making personal health services available to public assistance recipients. This should be done under a prepayment plan which is established in consultation with a state advisory council, is approved by a Federal health agency in accordance with Federal standards, . . ."

Immediately upon the Report's appearance, the AMA, through its President, Louis H. Bauer, raised its voice in protest against the proposal that Social Security funds be used to pay prepayment medical plans for medical service to beneficiaries of Old Age and Survivors' Insurance funds without regard to their own ability to pay. Dr. Bauer pointed out that some three million persons already receiving OASI checks would automatically be brought under the program without any further contributions of their own. Millions of others would also receive prepaid medical care from Federal Government as they reach 65.

Dr. Bauer said if these recommendations became a reality "the Federal Government, through payroll deductions, would pay directly for the medical care of a large segment of the population. This is compulsory health insurance."

Undoubtedly, this phase of the report will receive the attention of a committee appointed by the AMA to study the Report in detail. Its findings will undoubtedly appear in the *Journal of the AMA* before these comments are published

In a mildly humorous vein, Gerald G. Gross, able editor of the *Washington Report on the Medical Sciences*, entitled his comments on a statement made by the President of the AMA, "Bauer's Goals for Medicine Wear a Magnuson Complexion." Under this heading, Mr. Gross calls attention to the 9-point program offered by Dr. Bauer in a New Year's message appearing in the *Journal of the AMA* for December 27, 1952.

Dr. Bauer says that certain things "must be done if we are to preserve the American system of medicine." He listed them as follows:

> "(1) Work with rural communities to establish facilities for physicians, so that we shall have a better distribution of physicians; (2) see that good medical care for the indigent is available everywhere, just as it is in some states; (3) extend public health coverage to areas lacking it; (4) develop plans for the care of the chronic invalid; (5) expand our voluntary insurance program not only to cover more persons but to cover those over age 65 and those suffering from illness of long duration; (6) clean our own house, by disciplining those physicians who are tarnishing the reputation of the whole profession by their unethical acts of overcharging, accepting kickbacks, and making commercial arrangements with pharmacists; (7) see that the public is protected so that they can always obtain the services of physicians; (8) revitalize our county societies and make them leaders in their communities in all health matters; and (9) inculcate the newly trained physician in the traditions and ethics of medicine.
>
> "Then there are certain legislative matters that will require our attention and earnest study, such as: 1. The establishment of a department or independent agency of health in the Federal Government. It must not be tied in with education or social security. Health is important enough to warrant an agency by itself. 2. The making of constructive suggestions for the solution of the problem of the totally disabled under the social security law. 3. Obtaining sufficient physicians for the armed forces, without injustices or upsetting civilian medical care programs. 4. Enactment of a law allowing pensions or retirement privileges for the self-employed, along the lines of the Reed-Keogh bill introduced in the last Congress.
>
> "Another matter, which may or may not require legislation, is a solution of the problems related to the Veterans Administration."

In commenting on the above program, Mr. Gross says that "most of the objectives are surprisingly compatible with conclusions drawn by the President's Health Commission." Among the points of agreement, he mentions the improvement of rural health facilities, good medical care for the indigent, extension of public health coverage, increased attention to provision of adequate care for the chronically ill, and the expansion of the voluntary insurance program.

The AMA's views on the Commission's Report and its recommendations are anticipated by the medical profession with keen interest. It is hoped by many, including your Observer, that the Report will receive an objective and realistic appraisal and that the suggestions offered will be of a constructive nature, acceptable to the public.

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Psychiatry on the Air

Generally speaking, radio broadcasts sponsored by state and county medical societies have not been too enthusiastically received by the public. This has been due in part to the manner of presentation and the difficulty encountered by "amateurs," as most doctors are where broadcasting is concerned, to dramatize effectively significant events in medical progress.

The AMA and some of the larger state medical societies have at their command sufficient funds to employ professional directors and even well-known actors. Their programs are naturally superior and therefore attract a sizable audience. Infrequently, modest so-called sustaining programs are enthusiastically received by listeners, to the surprise of their sponsors. An example is the current broadcasts on "You and Your Mind," which are heard over Station WOL, Washington. Presented under the supervision of the Medical Society's Subcommittee on Mental Health, these broadcasts were undertaken upon the suggestion of George W. Campbell, Program Director of WOL, to whom much credit must be given for their success. He has given them the professional touch they needed.

Eight broadcasts have been presented on successive Friday nights since November 14, at 10:00 to 10:15 p.m., on the following topics:

Who Visits a Psychiatrist?
What Is Mental Health?
Psychiatric Facilities in the District of Columbia
Depressions
Parent-Child Relationships
Psychiatric Problems of Aging
Alcoholism
Marital Problems
Adolescence

The first indication that the broadcasts had a substantial following among radio listeners was a "story" in the *Washington Post* for January 4, entitled "Radio Takes Couch Out of Dark," by Sonia Stein. Space will not permit the inclusion of all of Miss Stein's article, but the following comments are significant:

> "All of the discussions have been extremely well integrated—good radio as well as good education—and the psychiatric jargon is almost never used. One of the best of the lot was the one on depressions, in which it was pointed out that depressions often occur in the most successful people and are frequently covered up so well by gaiety and activity the victim's family and friends may not recognize his condition. Particularly unfortunate here is the fact that sufficient remarks of the 'buck up' or 'you can do it if you try' variety may drive the truly depressed person to suicide.
>
> "WOL has had such good response from its nighttime series that it is planning to repeat the broadcasts (probably beginning the new series before the current one is over) during morning hours. I am pleased with the idea of these shows being given at unlikely times. They will do more good if encountered by people who have no knowledge of the field than if they were aimed at those already sufficiently interested in mental health to tune in.
>
> "I would like to see WOL submit the series for a Peabody award or other radio citation. 'Your Mind and You' is an excellently planned and executed series doing its small share in a job of almost incalculable importance."

Members of the Subcommittee and other psychiatrists who have contributed to the success of this program are to be highly commended for their efforts. They have, as the saying goes, "rung the bell."

T. W.

DISTRIBUTION OF YELLOW FEVER VACCINE*

The Rocky Mountain Laboratory, heretofore the sole manufacturer of yellow fever vaccine in the United States, has discontinued production of this vaccine. Henceforth it must be purchased; all orders should be addressed to: The National Drug Company, 4663 Stenton Avenue, Philadelphia 44, Pennsylvania.

Pending completion of arrangements for the above company to produce the vaccine in accordance with Federal and international requirements, that company is distributing the remaining stock of yellow fever vaccine produced by the Rocky Mountain Laboratory. The latter will continue to be a yellow fever vaccination center.

The International Sanitary Regulations require the "health administration" of each nation to designate yellow fever vaccination centers where travelers receive the vaccination and the authentic yellow fever vaccination certificate. Certificates issued by officially designated centers are the only ones recognized when immunization against yellow fever is required in international travel. The vaccine used for the inoculation must have been approved by the World Health Organization, which publishes a list of all designated yellow fever vaccination centers. In the United States the Surgeon General of the Public Health Service has been designated by Executive Order 10399, September 27, 1952, as the "health administration" to carry out the provisions of the International Sanitary Regulations. Accordingly the policy with regard to "yellow fever vaccination centers" is outlined below:

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* Reprinted from General Circular No. 99, Suppl. 1, issued by Dr. Leonard A. Scheele, Surgeon General, Public Health Service; revised November 25, 1952.

1. The centers will be designated only among:
    Public Health Service facilities
    Department of Defense installations
    Organizations with large numbers of employees going into yellow fever areas
    A health department in a state in which a yellow fever vaccination clinic of the Public Health Service is not available.
2. The Epidemiology and Immunization Branch, Division of Foreign Quarantine, is responsible for approving facilities for designation as yellow fever vaccination centers, and will conduct necessary investigation to ensure compliance with requirements for handling the vaccine.
3. Because the vaccine is highly thermolabile and must be stored and transported at a subfreezing temperature, strict control of its handling is required. Shipments of the vaccine are to be routed directly from The National Drug Company to the vaccination centers. The vaccine is not to be redistributed by the centers.

REPORT OF DELEGATES TO THE AMA CLINICAL SESSION*

In his address at the opening session of the Denver meeting of the House of Delegates, AMA President Louis Bauer keynoted some problems of immediate interest and touched on others that will undoubtedly become prominent at the next (June) meeting of the Association. In this latter category are his views on the question of whether or not enough physicians are being produced to fill the national needs for medical care. Dr. Bauer thinks so. He emphasized that the ratio of practicing physicians to population is higher in the United States than in any other major nation. He believes that there are shortages of physicians in some localities but that this is caused by strictly local conditions—not to be remedied by increasing the number of medical graduates. In view of the report of the President's Commission on the Health Needs of the Nation, since published, in which a contrary view is stated, this topic probably will be hot for discussion at the next meeting of the House.

Dr. Bauer spoke strongly in favor of a policy of making experience in general practice a prerequisite to certification by all specialty boards. He favors this policy because he believes that experience in general practice makes specialists better doctors and because, under existing circumstances, it is not possible for general practitioners to obtain certification as specialists except in internal medicine. In a later action the House of Delegates supported Dr. Bauer's views—directed the Speaker to appoint a special committee to prepare a report on the subject.

Dr. Bauer expressed strong feelings about ethics. He believes that physicians gain entrance too easily into some county medical societies. He recommended strengthening grievance committees for the purpose of disciplining unethical practitioners. (Incidentally, all state societies now have such committees.) He asked that a stronger program of lectures in medical ethics and practice be included in the curriculum of medical schools, and he proposed more rigid ethical requirements for admission of physicians to county medical societies.

MEDICAL EDUCATION

The outstanding feature of activity in the field of medical education and hospitals was approval of the revised "Essentials of an Approved Internship." In addition the Board of Trustees again appropriated a half million dollars for support of medical schools.

The revised "Essentials" repeatedly emphasizes that an internship must be planned for the education of interns and that advantages in terms of service to the hospital are of secondary importance. At the same time, it is pointed out that an internship is a full-time job, not to be discharged on "a nine-to-five basis."

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* The Sixth Clinical Session of the American Medical Association was held in Denver, Colo., December 2–5, 1952.

The "Essentials" strongly boosts the merits of a rotating internship as compared to a straight internship. However, the disadvantages of too rapid change of services are emphasized. In this connection, approval of a program can hardly be given when fewer than six men are available in a hospital having rotating internships. For hospitals unable to support an approved program, good suggestions are made for methods of providing adequate medical care without benefit of interns' services.

It is expected that the revised "Essentials" will reduce the great disparity between number of internships available and number of medical graduates. Although some excess of internships is a good thing, the existing disparity is too large for the good of hospitals and medical graduates alike. To reduce this disparity, hospitals are made vulnerable to withdrawal of approval when they fail for two consecutive years to obtain two thirds of their intern complement. In order to avoid that penalty, it is expected that many hospitals will lower the number of internships they offer, revising their educational programs accordingly.

FEDERAL GOVERNMENT

There were several areas in which AMA and Federal Government interests crossed. The most controversial concerned medical care of veterans. A report by a special committee recommended discontinuance of the present policy of providing medical care to veterans with nonservice-connected disabilities. The House of Delegates repudiated this idea—asked for further study—an action not surprising in view of the facts that this change is "political dynamite" and that the recommendation of the special committee had been held out of the committee report until the last moment.

The Reference Committee on Medical Military Affairs (Herbert P. Ramsey, member) dealt strongly with the thorny problem of doctors' draft and received the support of their fellow delegates. Recognizing that there are inequities in the present law, but proposing that the American Medical Association must support whatever legislation is needed to supply our armed forces with physicians, the House resolved that the Board of Trustees and Council on National Emergency Medical Service should be alert to all developments in this field and should support any necessary legislation. At the same time, a "framework of policy" was provided, as follows: (1) realistic revision of physical qualifications of physicians for military service; (2) encouragement of better recruitment programs; (3) better use of existing civilian facilities (for example, in providing medical care for dependents of service personnel); (4) economical use of physicians in military service; (5) avoidance of competition for physicians among Government agencies; (6) establishment of an equitable point system for discharge of physicians from military service; (7) insurance that physicians in category 3 shall not be called until all those in categories 1 and 2 have been processed. In a separate resolution, the House favored continuation of special bonus pay to physicians and dentists serving with the armed forces.

In other actions the House approved the idea of establishing a Federal Department of Health with cabinet status; urged withdrawal of the United States from the International Labour Organisation; and effectively muzzled those who would have proposed opposition to Public Law 590 (new social security law).

BLOOD BANKS

The House changed the name of the Committee on Blood Banks (Herbert P. Ramsey, Co-chairman) to the "Committee on Blood." The report called on those in this field to put "patriotism and the national interest" above some local and personal considerations in the National Blood Program.

Emphasis was given to the organization of state committees on blood and to the problem of the potential demand for gamma globulin. Blood and blood fractions are "critical" and, hence, are under the jurisdiction of the Office of Defense Mobilization. The report contains the following paragraph:

> "In view of the fact that the foreseeable supply of gamma globulin in 1953 cannot possibly meet more than a fraction of the potential demand for that product, the American Medical Association urges understanding and willing coöperation with the allocating mechanism upon the part of physicians, health officers, pharmaceutical companies and pharmacists, to the end that the over-all interests and needs of the American public may not be undermined by the sapping away at local levels of this critical human resource."

(*Continued on page 114*)

'LIFE . . . THE SUPREME ADVENTURE'*

ARTHUR CARLISLE CHRISTIE, M.D.

Washington

I thank you all most sincerely for your many kind expressions here tonight. I wish especially to thank the members of the committee who so carefully made the detailed arrangements for this dinner. I am grateful to the speakers for their skill and discrimination in choosing from my record the matters about which they could speak favorably. It would be ungrateful on my part if I should try to hide behind false modesty and attempt to depreciate the esteem which your presence here seems to convey. The approval of one's fellows is a legitimate ambition of every right-minded person, and in that light I am bold enough to accept the compliments of this occasion.

I must say to you, however, that if this testimonial meant only a personal compliment to me, a single individual, it might have passing interest but it would lack real importance. I like to look upon it as a recognition of those important activities and ideals which we have shared in common.

When I left college and, as I once heard Theodore Roosevelt say, began my education, I was burdened, like many college graduates, with a considerable weight of self-esteem. Under the difficult conditions of medical practice in a rural community in the early years of this century I soon lost most of that burden. Indeed I began to wonder by what miracle of leniency or blindness on the part of the faculty I had been able to graduate at all. As the years have passed the buffets of fortune have been sufficiently frequent to keep my ego well deflated until I have come to think that my graduation from medical college and subsequently from other schools and courses was well described by a great and good friend of mine, the late Bishop McDowell. He said that when he graduated from college some of his fellow-students graduated *cum laude*, with praise; a few graduated *magna cum laude*, with great praise; and one even graduated *summa cum laude*, with the highest praise; "but," said the good Bishop, "I graduated *mirabile dictu*, wonderful to tell."

I think the principal influence which brought my egotism down to a proper level was the early realization that individual success and advancement in life are due to a great variety of forces and circumstances, most of which are not under the individual's control. Tennyson wrote with true discernment when he made Ulysses say, "I am a part of all that I have met." I would not like to imply that I hold a fatalistic or deterministic philosophy. My father used to tell a story about his grandfather who settled in western Pennsylvania in early pioneer days. He was a Scotch Presbyterian and like all good Calvinists believed in predestination. Someone rallied him upon the inconsistency of carrying a gun with him into the fields to protect himself against the Indians. They said, "You can't die until your time comes, so why carry the gun?" "Well," he said, "you know I might meet an Indian whose time had come and I would want the gun along to fulfill *his* destiny." That is a good illustration of the combination of what William James called "the stubborn facts of life," on the one hand, and individual initiative, on the other, which go to make up one's total experience. As Aldous Huxley once said, and as many others before him had said, "Experience is not what happens to you, it is what you do with what happens to you. It is not the accidents of life but a sort of prize for the way you deal with those accidents."

No thoughtful person whose active life has spanned, as has mine, the first half of this present tremendous century can fail to have some appreciation of the revolutionary changes which modern science has wrought in our individual lives. It has given man control over the forces of the universe to such an extent as to immeasurably enlarge and expand human powers. It has given him facilities for comfort and enjoyment such as no previous age has known. It has enhanced his security and lengthened his life through a growing knowledge of the causes and methods of control of disease.

These revolutionary changes have taken place in the short period of half a century. In the latter years of the 19th century the scientists of that day had reached the conclusion that the structure of the universe was well understood, they knew or could predict the elements of which it was composed, and they had discovered, so they thought, most of the laws by which it operated. Professor Michaelson, one of the great physicists of that day, said in an address at the dedication of a physical research laboratory in Chicago, in the year 1893, that we now knew the structure of the universe and its laws, all that remains is to systematize our knowledge. In retrospect the scientists of that day, great men as many of them were, remind me of an anecdote I heard a few years ago in Boston when I was delivering the George W. Holmes Lecture before the New England Roentgen Ray Society at the Harvard Club. It was to the effect that a Harvard professor had had a dream that he was lecturing to his class. He suddenly waked up to find that he was. Well, our scientists of the 1890's suddenly awakened from the comfortable, static world in which the elements were so neatly arranged to find themselves in a completely new universe of which only a few great minds like Clerk Maxwell had even dreamed. In the year 1895, Wm. Conrad Roentgen in a little laboratory at the University of Wurzburg made the discovery which was the key to that new world. The discovery of the X-ray, and only three years later of the radioactive elements, uranium and radium, were the beginnings of that vast new conception of the physical universe which is the basis of modern physical science. We suddenly found ourselves not in a static or fixed world but a part of a great universe constantly in flux and undergoing continued change—a world composed not of inert material things, but a world in which the things themselves are the source of illimitable energy.

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* These remarks constitute the response Dr. Christie made to the testimonials given at the dinner in his honor at the Shoreham Hotel in Washington, December 20, 1952.

These newly discovered forces had just begun to be utilized in a very limited way in the medical field in the early years of this century. Men's minds were stimulated by the new discoveries to investigations in many fields. It was then that the idea of prevention of disease as well as its cure began to gain ground. For instance, at that time the means for the prevention of smallpox had been known for a century but it has been only during the past 50 years that vaccination has become generally accepted and practiced. Even when I went to the Philippine Islands as a young Army doctor in 1907, smallpox was a common disease in the Orient and there were still sizable epidemics in this country. Nothing has been more completely proved than the fact that vaccination prevents smallpox. It is only where vaccination is neglected that the disease still raises its ugly head. How can we have patience with those irresponsible persons who call themselves anti-vaccinationists who are willing to risk the lives of countless people as a result of their pernicious activities?

But smallpox is only one of many dangerous diseases which modern science has brought under control. Typhoid, typhus, yellow fever, bubonic plague, cholera, and malaria were common and widespread at the beginning of the century. Now they are so rare that a doctor may practice many years and fail to see a single case of any of them.

There is no better illustration of the conquest of disease by preventive methods during the past half century than our experience with tuberculosis. When I began to practice medicine there were 200,000 deaths from tuberculosis in the United States each year; now in a much larger population the annual deaths have been reduced to 25,000. Even to this day we know of no specific cure for the disease, but by persistent use of our growing knowledge we are gaining such headway in its control that we look confidently to the time when it will no longer be an important menace.

Truly, the ideal for which we constantly strive is the prevention of disease, and every conscientious doctor has this in the background of his thinking even while he goes about the pressing job of treating the disease which cannot yet be prevented. How these 50 years have added to the armament with which we combat disease! Time fails one even to mention the myriad of advances which have been made. If they had taken place in a thousand years instead of 50 it would be a miracle of achievement. At the present time progress is taking place so rapidly that one does not dare miss a single medical journal for fear some revolutionary discovery will be announced. We must learn a completely new nomenclature pertaining to vitamins, hormones, antibiotics, and innumerable synthetics which were unknown 50 years ago. Sometimes the task of keeping abreast of the new nomenclature seems almost hopeless and we feel like echoing Hamlet's reply when Polonius asked, "And what do you read, my lord?" and Hamlet answered, "Words, words,

words." But many of these words are the result of painstaking research and some of them the very words of life for many sufferers.

And, now, in closing, I wish to say to you a few personal words, for I feel that you are all my friends and would be interested in knowing what I actually believe about it all. My entire life has been largely controlled by the disciplines of science both in my education and training and in the practice of the art of medicine which entails a constant effort to put scientific knowledge into practice.

I have held the conviction, however, from my earliest years that science does not furnish the answer to the deepest mysteries of life. I can come immediately to what I wish to say by repeating a verse which was quoted in a recent issue of the *Cancer Bulletin*:

"Beyond the bright search lights of science,
Out of sight of the windows of sense;
Old riddles still bid us defiance,
Old questions of Why and of Whence."

The deepest facts of human experience, those facts bound up with personality and man's ultimate destiny, are beyond the purview of science. The man who said that he had looked through the strongest telescope into cosmic distances unbelievably remote and had found no God there might also have truly said that he had looked through the most powerful microscope into the most infinitesimal magnitudes and had seen no God there. Even further, he might have observed that he had examined the human brain most carefully and had found no trace of personality. That is not remarkable because the spiritual is discerned not by the methods of science but through the eyes of personal experience. To the materialist, mountains and stars are mountains and stars, but to the spiritually discerning person "the heavens declare the glory of God and the firmament showeth His handiwork."

I hold such a faith now as a cardinal anchor amid the vicissitudes and uncertainties of life. I am impressed with the truth implied in the sententious remark of Professor Whitehead that "the man who spends his life with the purpose of proving that his life is purposeless is a subject for study." It has been impressed upon me that there are two ways of arriving at the truth, each complementary to the other. There is the way of observation, experiment and mathematical computation, which is the way of science, and through which we arrive at the truth about the physical universe. On the other hand, there is the way of personal experience by which we gain knowledge of the spiritual universe, where we deal with ultimate values, and in which the unit of value is human personality. It is vitally important for us, American citizens, in this crucial day of the world's history to recover this belief in the integrity and worth of human personality. It is the foundation of democracy and of the American way of life. It is the center of all worthwhile religion and must always be a fundamental idea of the good physician.

Well, yesterday was my last day in the active practice of medicine. I might tell you how I feel on this first day of my retirement—perhaps a little like the man whose mother-in-law had driven off a cliff in his new Cadillac car. He said he viewed the accident with mixed emotions. One thing, however, I am sure of, that I come to this day of retirement with no feeling of having reached the end of the road. I look back over life with a feeling of gratitude and satisfaction that I have been permitted to have even a tiny part in so great an age. One can view life in true perspective only in the light of history. As Cicero said two thousand years ago, "He who is ignorant of the past is condemned to repeat its mistakes." But today I am looking forward to great times to come. I am an incorrigible optimist believing that progress is always possible even though it is not inevitable. I look upon life as the supreme adventure with a far destiny which no man can foresee. I hope to go on to whatever the future holds in the spirit of John Masefield's "Laugh and Be Merry," which I have often quoted, and which expresses something of my philosophy of life.

News and Personals

The District Medical Society's second **Midwinter Medical Seminar** will be held this year on March 17, 18 and 19, from 8 to 10 p.m., in the Medical Society's building. The program will be found on pages 87–8 of this issue. This Seminar has been arranged by the Program Committee, headed by Dr. Darrell C. Crain. All committee members have worked diligently to assure a successful meeting; in addition to the chairman, they are: Dr. Paul Kiernan, Vice Chairman, and Drs. Seymour Alpert, Joseph F. Belair, Peter D. Comanduras, Karl Dortzbach, Herbert S. Gates, William L. Howell, William S. McCune, John P. McGovern and Francis J. Murray.

George Washington University School of Medicine offers three full-time **intensive postgraduate courses,** each one week in length, for the spring of 1953. The first, on Surgical Physiology, will be presented during the week of February 23; Obstetrics and Gynecology will follow for the week of March 9; and the series will conclude with a course in General Medicine during the week of March 23.

These courses will be held in the Main Conference Room of the Hospital. The total fee for each course is $75, with registration to be accomplished by mail prior to the beginning of the course. All correspondence should be sent to the Director of Postgraduate Instruction, George Washington University Hospital, 901 23rd Street, N.W., Washington 7, D. C.

The University also announces speakers for the **1953 Kellogg Lectures,** a series of lectures sponsored by the University to commemorate the financial aid received from the W. K. Kellogg Foundation of Battle Creek, Michigan, during 1946 and 1947. These lectures will be presented in Hall A of the School of Medicine, 1335 H Street, N.W., beginning at 8:30 p.m.

A calendar of subjects and lecturers follows:

February 23: "Methods for the Reduction of Surgical Blood Loss," Dr. Charles Ronald Stephen, Professor of Anesthesiology, Duke University

February 26: "Intestinal Obstruction," Dr. John William Devine, Attending Surgeon, Lynchburg (Virginia) General Hospital

March 9: "Cancer of the Cervix," Dr. Joe Vincent Meigs, Clinical Professor of Gynecology, Harvard University

March 23: "Electrolyte Disturbances in Clinical Practice," Dr. George Thomas Harrell, Jr., Professor of Medicine, Bowman Gray School of Medicine

March 26: "Clinical Influences in Health and Disease," Dr. Clarence Alonzo Mills, James T. Heady Professor of Experimental Medicine, University of Cincinnati

Members of the Medical Society are cordially invited to attend these lectures.

The Navy Medical Department officer training course in Medical Aspects of Special Weapons and Radioactive Isotopes, given at the Naval Medical School in Bethesda, Md., has been expanded to a two-week course of instruction. The title of the course has also been changed to **Medico-Military Training Program,** and the first course under the new training curriculum will convene at the Naval Medical School on March 16.

The first week of the course will be devoted primarily to presenting problems likely to be confronted and technics to be employed by Medical Department officers in the field of radiological activities. The second week will be devoted to practical aspects of medico-military matters, including orientation in all phases of the Naval Reserve medical program.

Reserve officers residing in the 1st, 3rd, 4th, 5th, 6th, 8th and 9th Naval Districts and the Potomac River Naval Command who desire to attend this course should submit their requests for 14 days' training duty to the Commandants of their respective Naval Districts at the earliest practicable date. Attention is called to the fact that acceptance of orders to attend this course will not, in any way, increase the possibility of call to extended active duty. Personnel concerned are encouraged to take advantage of the opportunity to attend this course.

CALENDAR OF MEETINGS, DECEMBER 16–JANUARY 15, 1953

December 16	Grievance Committee Executive Committee, D. C. Survey of Medical Care of Indigents Society of Registered X-ray Technicians Lay Society, Diabetes Association of D. C. D. C. League of Nursing Education
December 17	Washington Psychiatric Society
December 18	Committee on Medical Care Medical Aid Committee for Inaugural Committee 1953 Committee on Insurance
December 22	Executive Board Washington Orthopedic Club
January 5	Subcommittee on Mental Health Graduate Nurses' Association
January 6	Executive Committee, D. C. Survey of Medical Care of Indigents Graduate Nurses' Association
January 7	Executive Board, Woman's Auxiliary
January 8	Program Committee Section on Neurology and Psychiatry
January 9	House Committee Washington Psychoanalytic Society
January 10	Washington Psychoanalytic Society
January 12	Jango Graduation, Doctors Hospital
January 13	Subcommittee on Alcoholism Medical Officers' Reserve Units
January 14	Woman's Auxiliary Washington Heart Association
January 15	Committee on Public Health

The Medical Section, Headquarters Second Army will conduct a series of **Medical Orientation Conferences for Reserve Officers of the Army Medical Service** in the Second Army Area. The meetings are scheduled as follows:

Cleveland, Ohio, March 14; Cincinnati, Ohio, March 15; Philadelphia, Pa., March 21; Pittsburgh, Pa., March 22; Richmond, Va., March 28; Baltimore, Md., March 29.

Following previous policy the Medical Section is taking the Medical Orientation Conferences to the field so as not to infringe on the professional time of Reserve Medical Officers. A further convenience is that they are being conducted on weekends with a starting time of 1:30 p.m.

Reserve Medical Officers should contact their Unit Instructors for complete details.

The Department of Medicine of Georgetown University School of Medicine is conducting a **Postgraduate Course in Clinical Electrocardiography.** Instructors for the Course are Dr. Joseph M. Barker, Associate Professor of Clinical Medicine, and Director of the University Hospital's Heart Station, and Dr. W. Proctor Harvey, Assistant Professor of Medicine. Classes are being held weekly from 7 to 9 p.m. in Room 101 of the School of Medicine. They began February 9 and will continue through April. Fee for the course is $50.

The Sectional Meeting of the American College of Surgeons will be held at the Atlanta Biltmore Hotel in Atlanta, Georgia, February 23 and 24. The Georgia Chapter of the College is planning the meeting. An added feature is the concurrent Atlanta Postgraduate Medical Assembly, to which Sectional Meeting visitors are cordially invited. There will be three joint sessions of the Assembly and College. Surgeons from the southeastern states will be present, although there is no restriction on attendance from outside the area.

The Medical Society's **Section on Pathology and Laboratory Medicine** will meet on March 13, at 8 p.m., in the home of Colonel Virgil H. Cornell. Drs. William Dolan and Richard E. Palmer will discuss "Hemoglobin Determinations."

The Washington Medical and Surgical Society will meet for dinner at Hotel 2400, February 23. A paper on "Anesthesiology" will be presented by Dr. Robert Cross; discussants of the paper will be Drs. C. Willard Camalier, Jr., Edward C. Wilson, William K. Billingsley, and Harold M. Hobart. Dr. Hobart will also give a case report.

For its guest speaker, March 25, the **Washington Psychiatric Society** has invited Dr. Frederick H. Allen, Professor of Clinical Psychiatry of the University of Pennsylvania School of Medicine and Director of the Philadelphia Child Guidance Institute, to speak on "Child Psychiatry." The meeting will be held in the Medical Society's auditorium at 8:30 p.m.

The American Society for the Study of Sterility announces its **1953 contest** for the most outstanding contribution to the subject of infertility and sterility. The winner will receive a cash award of $1,000, and the essay will appear on the program of the 1953 meeting of the Society. Essays submitted in this competition must be received not later than March 1, 1953. For full particulars concerning requirements of this competition, address Dr. Herbert H. Thomas, 920 South 19th Street, Birmingham, Alabama.

Qualifying examinations for fellowship in the **United States Section of the International College of Surgeons** will be held on the following dates in 1953: May 4 and 5, August 10 and 11, and November 2 and 3. The examinations will be given at the Cook County Graduate School of Medicine and the Cook County Hospital. Applicants are requested to address communications to Dr. Harry A. Oberhelman, Secretary, Qualifications and Examinations Council, 1516 Lake Shore Drive, Chicago 10, Ill.

The Executive Board of the Medical Society of the District of Columbia held its regular monthly meeting on December 22. The Board voted to redesignate the Committee on Blood Banks the Committee on Blood, in keeping with the AMA's Committee title.

Dr. Karl C. Corley was named Chairman of the Committee on Medical Education Fund, succeeding Dr. Alan F. Kreglow, who resigned.

Drs. Robert E. Moran and Hugo V. Rizzoli were named advisors to the Committee on Medical Ethics and Deportment.

The Board approved the changes in personnel of the Obstetrical Board, reported in the January Annals, page 50.

"The Heart of America," a current radio series on heart disease, is being broadcast currently over Station WWDC every Monday at 10:15 p.m. The series began January 12 and will continue for 13 weeks. It is being sponsored jointly by the Washington Heart Association and the District Medical Society. The text for the series was prepared by the Bureau of Health Education of the AMA in cooperation with the American Heart Association. Various aspects of the heart and its diseases are dramatized, with summaries by outstanding cardiologists and related experts.

On January 14 the Scientific Council of the **Washington Heart Association** presented a lecture on "Shoulder Girdle Syndromes" by Dr. Irving S. Wright, President of the American Heart Association, in the Medical Society's auditorium. Dr. Wright is Professor of Clinical Medicine of Cornell University Medical College.

The first **Clinical Meeting of the American Academy of Obstetrics and Gynecology,** which was held in Chicago, December 15–17, drew an attendance of more than 1,100 Fellows and guests. Dr. John Parks, Professor of Obstetrics and Gynecology, George Washington University School of Medicine, delivered one of the principal addresses on "Placenta Accreta," and was also chairman of a round table discussion on this subject. Drs. Samuel M. Dodek and Joseph M. Friedman, of George Washington University Hospital and School of Medicine, presented a scientific exhibit on "Control of Lactation with Testosterone." Dr. Howard A. Donald was chairman of a round table discussion on "Placenta Abruptio," and Dr. J. Bay Jacobs headed one on "Forceps Deliveries."

In addition to the participants mentioned above, Washington physicians who attended this meeting were Drs. James A. Dusbabek, George J. Ellis, Robert B. Nelson, Jean E. Paquin, Jed Williams Pearson, and Josephine E. Renshaw.

Dr. Robert A. Kimbrough, Jr., of Philadelphia, was installed as President of the Academy; the new President-elect is Dr. Bayard Carter, of Durham, N. C.

The second Clinical Session will be held in the Netherland Plaza Hotel, Cincinnati, December 14–16, 1953. Chairman of the Program Committee is Dr. Andrew J. Marchetti, of Washington.

Dr. William B. Walsh represented the Physician-Veterans of World War II of Washington, D. C., at a national meeting of physician-veterans organizations in Toledo, Ohio, December 7. The meeting was held to form a national organization, the **Medical Veterans Society.** Representatives of 22 state organizations were present at the initial meeting. Dr. Walsh was named Chairman of the Legislative Committee. Temporary officers were elected to serve until the first national meeting in June, when permanent officers will be elected. The June meeting will be held in New York City concurrently with the Annual Session of the American Medical Association.

Dr. Frank E. Wilson, Director of the Washington Office of the AMA, in coöperation with the AMA's Committee on Legislation, called a **regional conference on Federal medical legislation,** which was held at the Army-Navy Club, December 15. Dr. Walter B. Martin, of Norfolk, Va., a member of the AMA Committee on Legislation, presided. Present were state medical society officials and legislative representatives from Virginia, West Virginia, Maryland and the District of Columbia. Representing the Medical Society of the District of Columbia at this meeting were President Wallace M. Yater and Drs. Frederick C. Fishback, William P. Herbst, Joseph S. Lawrence, Herbert P. Ramsey, Maurice A. Selinger, R. Lomax Wells, and Secretary of the Society, Theodore Wiprud.

The Clinico-Pathological Society was invited to hold its meeting, January 27, at the home of Dr. Wendell Willett in the Westchester Apartments. Dr. Crenshaw D. Briggs read a paper on "Regional Ileitis."

Children's Hospital new $3,300,000 structure was officially opened on December 22. Special ceremonies were held in the lobby from 6 to 9 p.m., an open invitation having been extended to contributors, campaign workers and friends of the Hospital who helped to make the "1946 dream a 1952 reality."

Among those who took part in the ceremonies were Dr. Edgar P. Copeland, Chief of the Medical Staff, who came to the Hospital in 1898 as a resident student; Dr. Montgomery Blair, Jr., Medical Director; Miss Edith A. Torkington, Administrator; and Miss S. Kathryn Witmer, Director of Nursing. Canon Charles Martin, headmaster of St. Alban's School, dedicated the building. Missing from the reception was the late Dr. Joseph S. Wall, until recently Chief of the Medical Staff. The building includes an auditorium named in his honor.

Founded in 1870, Children's Hospital has grown from 4 doctors to a present consulting staff of 19 physicians, an attending staff of 45 physicians, associate and junior associate staff of 183 physicians, and a resident and extern staff of 25 physicians. These include representatives from every region in the United States.

The Editorial Board of the MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA met for its annual dinner at Pierre's Restaurant, January 7. Dr. Wallace M. Yater, Editor of the ANNALS, presided during the discussion period which followed the dinner. All members of the Board were present together with the Managing Editor and Assistant Editor. A guest at the dinner was Mr. Harvey T. Sethman, of Denver, Managing Editor of the *Rocky Mountain Medical Journal*, who spoke briefly on problems with which his journal is confronted.

The office of the **AMA Committee on Blood** has been transferred from the Washington Office to AMA headquarters in Chicago, 535 North Dearborn Street. This change was made necessary when Dr. Frank E. Wilson, who has been serving as Secretary of the Committee, assumed directorship of the Washington Office. Dr. Paul L. Wermer, Secretary of the AMA Committee on Research, was appointed by the Board of Trustees to succeed Dr. Wilson as Secretary of the Committee on Blood

The Washington Regional Blood Center moved to the new building of the District of Columbia Chapter, American Red Cross, at 2025 E Street, N.W., early in January. The telephone number is Executive 3-7600.

Several new medical journals are slated to appear in 1953. An early arrival in the Medical Society's offices was the *Journal of the Albert Einstein Medical Center*, the first issue of a new quarterly published by the Albert Einstein Medical Center, a consolidation of the Jewish, Mt. Sinai and Northern Liberties Hospitals of Philadelphia. The first number contains 9 scientific articles, 3 signed book reviews, and no advertising. The journal is designed particularly for publishing material originating in the Medical Center.

The Washington Society of Pathologists held its regular meeting, January 5, at the Army Medical Service Graduate School, Walter Reed Army Medical Center. Dr. Kenneth L. McCoy, of Providence Hospital, presented some interesting cases. Two papers were read: "Salmonella Infections Complicating Relapsing Fever (Troops in Korea)," Lt. Colonel L. E. Zimmerman, MC, USA, of the Armed Forces Institute of Pathology; "Sickle Cell Disease as a Cause of Sudden Death," Lt. Colonel C. F. Vorder-Bruegge, also of the Institute of Pathology.

The George Washington University Medical Society met in the Medical Society's building, January 21. The guest speaker was Dr. William O. Negherbon, Associate of the Pasteur Institute of Indo-China and formerly of Harvard University. Dr. Negherbon described medical conditions in Indo-China.

The Women's Medical Society and the Women's Bar Association held a joint dinner meeting, February 3, at the Broadmoor Apartments. The speaker was Leslie Ford, well known author.

Dr. Howard A. Rusk, Associate Editor of the *New York Times*, whose articles on rehabilitation have received Nation-wide attention, has received the $10,000 Criss Award and gold medal in recognition of his work in rehabilitating the physically handicapped. The award was established by the Mutual Benefit Health and Accident Association of Omaha to honor outstanding contributors to the fields of health and safety; it also serves as a tribute to the late Dr. C. C. Criss, founder of the organization.

Dr. Rusk is Director of the Institute of Physical Medicine and Rehabilitation of the New York University-Bellevue Medical Center. He first gained national attention during World War II as Chief of the Army Air Forces Convalescent Services Division. After the War he became Professor and Chairman of the Department of Physical Medicine and Rehabilitation of New York University College of Medicine, the first department of its kind in the Nation. He is also Chief of Rehabilitation Service of Bellevue Hospital.

Dr. Rusk was chosen from among more than 150 nominees by a board of judges headed by Dr. C. W. Mayo of the Mayo Clinic, Rochester, Minn. Members of the board included Dr. John W. Cline, President of the AMA; Dr. Thomas Parran, Dean of the Graduate School of Public Health, University of Pittsburgh; and Dr. Leonard A. Scheele, Surgeon General of the USPHS.

Dr. Richard L. Meiling, who was the first Chairman of the Armed Forces Medical Policy Council of the Department of Defense, was recently honored by the faculty and the University of Munich in Germany.

Dr. Meiling, who is presently Associate Dean of the College of Medicine and Associate Professor of Obstetrics and Gynecology of Ohio State University, Columbus, was the first physician to be given the academic robes of this University, founded in the 15th century, and the privileges of the medical faculty. Dr. Meiling, who graduated from the University of Munich School of Medicine in 1937, flew to Germany to accept the honor and, while there, delivered the only American paper before the International Congress of the German Gynecological Society, which was attended by 2,000 physicians from 23 nations.

Dr. Meiling served two years as Secretary of the AMA Council on National Emergency Medical Service and is now serving as a member of the Council. He is an Honorary member of the Medical Society of the District of Columbia.

Dr. Robert A. Cohen, an Associate member of the District Medical Society, has been appointed Clinical Director of the National Institute of Mental Health, one of the National Institutes of Health, at Bethesda, Md. Dr. Cohen, who has been consultant in psychiatry to the U. S. Naval Hospital since 1946, will be responsible for conducting a program of clinical research in mental diseases and psychotherapy in the new Clinical Center in Bethesda.

Dr. Cohen received his degrees as doctor of medicine and doctor of philosophy in physiology from the University of Chicago in 1935. He entered Johns Hopkins Hospital for psychiatric training in 1937; during the years 1938 to 1941 he was resident physician at the Sheppard-Pratt Hospital in Towson, Md. and served on the staff of the Institute for Juvenile Research in Chicago. He was on active duty with the Naval Medical Corps from 1941 to 1946 and holds the rank of Commander in the Reserve Corps. He has been Clinical Director of Chestnut Lodge since 1948.

Colonel Dwight M. Kuhns, MC, USA, has been appointed Chief of the Pathology and Allied Sciences Division in the Surgeon General's Office, succeeding Colonel Hugh Gilmore, Jr., who has been appointed Curator of the Army Medical Museum.

Colonel Kuhns recently completed a tour of duty as Chief of the Laboratory Service of Walter Reed Army Hospital. During World War II he served as commanding officer of the Fourth Service Command Laboratory and later as commanding officer of the 19th Medical General Laboratory and consultant in pathology to the Southwest Pacific Theater.

He was certified in clinical pathology and pathological anatomy by the American Board of Pathology. He is an Associate member of the Medical Society of the District of Columbia.

Dr. Winfred Overholser was the official representative of the American Psychiatric Association at the International Congress of Neuropsychiatry, held in Santiago, Chile, December 9–15, 1952. He was one of three delegates who were made Honorary members of the Medical Faculty of the University of Chile.

Dr. Overholser also appeared on the program of the Congress; he spoke on "Psychiatric Education, Undergraduate and Graduate."

CALENDAR OF SPEAKERS

The following members of the Medical Society of the District of Columbia have addressed lay groups during the past several weeks. The Society maintains a Speakers Bureau, sponsored by the Committee on Public Relations, through which requests for speakers for lay groups, including radio programs, can be filled.

Date	*Speaker*	*Subject or Title*	*Organization*
Nov. 13	Dr. Addison M. Duval	Mental Health of College Students	District of Columbia College Health Association
	Dr. A. Earl Vivino	Health Program at Georgetown University	
Nov. 20	Dr. John R. Pate	Our Cancer Problem	Greater Washington Chiropractic Society
Nov. 21	Dr. Edward C. Mazique	Community Health Problems	Coördinating Committee of Anacostia and Vicinity
Dec. 1	Dr. Daniel L. Seckinger	Our City's Health Needs—Diagnosis and Prescription	Washington Branch, American Association of University Women
Dec. 3	Dr. Charles S. Wise	Program for the Rehabilitation of the Young Adult Cerebral Palsy Patient at George Washington University Hospital	District United Cerebral Palsy Association
Jan. 13	Dr. Maurice H. Herzmark	Exercise and Posture	NBC-TV Inga's Angle
Jan. 14	Dr. Maurice H. Friedman	The Future of Medicine	Woman's Auxiliary to the Medical Society of D. C.
Jan. 14	Dr. P. A. McLendon Dr. Harold Stevens	Establishment of a Neurologic Clinic Including Epilepsy at Children's Hospital	Women's Association of Allied Beverage Industries
Jan. 27	Dr. Addison M. Duval	Psychiatric Facilities in the Washington Area	Woman's Auxiliary to Optimist Club
Jan. 27	Dr. Frank J. Eichenlaub	Skin Problems	NBC-TV Inga's Angle
Jan. 27	Dr. Marshall M. Parks	Medical Aspects and Visual Effects of Television	Parent-Teachers Associations of Grant and Lowell Schools
Feb. 10	Dr. Addison M. Duval	Psychiatry and the Community	Washington Club

Dr. Sydney Ross attended the first International Antibiotic Congress, which was held in Buenos Aires, Argentina, December 6–13, 1952, and presented a paper before the Congress entitled, "Current Therapy of H. Influenza Meningitis."

Dr. Monroe J. Romansky, consultant in internal medicine to the Surgeon General of the Army, returned to the United States, December 18, after a six weeks' tour of Army hospitals and installations in Germany and Austria.

During his tour abroad Dr. Romansky addressed the Royal Society of Medicine in London, the Geneva Medical Society in Switzerland, and the Pasteur Institute in Paris on current trends in antibiotic therapy. He is an Associate Professor of Medicine of George Washington University School of Medicine.

Dr. Harold Jeghers, Professor of Medicine, Georgetown University School of Medicine, addressed the senior class of Creighton University School of Medicine at Omaha, Nebr., November 13, on the subject, "Carcinoma of the Stomach."

On January 13 Dr. Jeghers spoke at the General Staff Meeting of the Delaware Hospital in Wilmington. His topic for discussion was "Improving the Teaching Program in a General Hospital."

At the meeting of the **Southern Surgical Association** in Miami, Florida, December 9–11, Dr. Harry H. Kerr presented a paper on "Estrogen in the Diagnosis of Early Lesions of the Breast." Co-authors of the paper were Drs. Ernest A. Gould and Ralph D. Whitley. Their paper was discussed by Dr. Murray M. Copeland. Drs. William S. McCune and J. Ross Veal also participated as discussants of papers presented at this meeting.

Elected to membership in the Association was Dr. Paul C. Kiernan, Associate Professor of Surgery, Georgetown University School of Medicine.

Dr. John A. Reed, Secretary of the American Diabetes Association and Chairman of the Association's Committee on Diabetes Detection and Education, attended the ADA's Interim Council meeting and Postgraduate Course in Toronto, Canada, January 15–20. While in Toronto Dr. Reed was a guest of Dr. Charles Best, co-discoverer of insulin. On January 17 he presented the annual report of his committee.

Mr. F. Royce Franzoni, Past President of the District Pharmaceutical Association, will be installed as President of the American Pharmaceutical Association in Salt Lake City, August 16. Mr. Franzoni is President of Z. D. Gilman, Inc. He is an Associate member of the District Medical Society.

Dr. Henry L. Darner has been elected Chairman of the **Medical Advisory Board of the Planned Parenthood Association of the District of Columbia** to succeed Dr. Walter Stokes, who recently resigned. New members of the Board are Drs. Henry D. Ecker, Maurice H. Friedman, Caroline Jackson, Shirley S. Martin, Neel J. Price, William T. Spence and Marshall deG. Ruffin.

The Board named the following physicians to serve as its Executive Committee: Drs. Isadore M. Alpher, Albert S. Bright, George Nordlinger, Carolyn Pincock, and Maurice A. Selinger.

Dr. Edward C. Mazique was reëlected President of the Medico-Chirurgical Society of the District of Columbia for his third term, December 19. **Dr. Reginald G. James** was elected Vice President. Both physicians are Active members of the District Medical Society.

Dr. Arden Freer, who retired as Deputy Chief Medical Director of Veterans Administration, December 20, received VA's highest award, the Exceptional Service Medal, from Administrator Carl R. Gray, Jr. on December 8. The citation is the fourth such award to be presented by VA.

Dr. Maurice H. Herzmark is conducting a monthly series of lectures on backache, posture, and exercises for VA physicians at the VA Regional Office, 1825 H Street, N.W. The first lecture was given on December 27 and the second on January 20.

The Surgical Service staff of **George Washington University Hospital** has selected **Dr. Maxine A. Schurter** as their "outstanding intern" this year. She is the first woman to receive this annual award and one of the first women to intern in surgery at the Hospital. She graduated from George Washington University in 1950, and took her medical internship at Barnes Hospital in St. Louis before returning to George Washington Hospital for postgraduate training in surgery. As winner of the award, she will receive a free trip to any clinic of her choice in this country.

Mr. H. Gabriel Murphy has succeeded Mr. Walter N. Tobriner as President of the **Hospital Council of the National Capital Area.** Mr. Murphy is a member of the Board of Trustees of Emergency Hospital.

Captain George William Ware, MC, USA, who has served as Chief of the Thoracic Surgery Section of Valley Forge General Hospital, Phoenixville, Pa., advised the Secretary of the District Medical Society in January that he was making plans to return to Washington after a two-year period of duty.

Dr. Theodore Bisland, an Active member of the District Medical Society, has been on active duty with the U. S. Air Force in Fort Worth, Texas, for more than 6 months. He is with the 7th Medical Group at the Carswell Air Force Base.

Lt. Ralph J. Carbo, Jr., has been promoted to Captain and designated Chief Ophthalmologist at the Eye, Ear, Nose and Throat Clinic of Fort McClellan (Alabama) Post Hospital. Captain Carbo is a native Washingtonian and a graduate of Georgetown University School of Medicine. Both Dr. Carbo and his father are Active members of the District Medical Society.

Dr. Donald Walters, an Active member of the Medical Society, has been released from service and has returned to his practice in Washington, with offices at 1475 Euclid Street, N.W.

BOOK REVIEWS

Standard Values in Blood, being the first fascicle of a Handbook of Biological Data. Edited by ERRETT C. ALBRITTON, A.B., M.D., Fry Professor of Physiology, The George Washington University. Prepared under the direction of the Committee on the Handbook of Biological Data, American Institute of Biological Sciences, The National Research Council. Price, $4.50. Pp. 199. Philadelphia: Saunders, 1952.

This book, the first of a series on biological data published under the auspices of the American Institute of Biology and the National Research Council, fulfills the current need for an authoritative collection of statistical data on the general subject of blood. The editors have skillfully utilized more than 600 leading investigators in compiling and critically reviewing information on the physiochemical composition and reactions of blood.

The material is presented, whenever possible, in a tabular form with an indication of range of variability and representative mean. Where controversy exists, as in the physiology of coagulation, diverse opinions are presented without comment. In a concise fashion the editors have incorporated exhaustive human and animal data on the general physical properties of blood; blood groups; development, characteristics and values of formed elements; chemical values including hormones, vitamins, and enzymes; effective blood levels of therapeutic agents; and the effects of irradiation on formed elements and hematopoietic centers. The second section is devoted to a carefully selected bibliography arranged according to subject matter.

This book is invaluable as a reference volume in both clinical and research laboratories. It seems to the reviewer, however, that less detailed books, already available, are more suitable for the purposes of most physicians engaged in the private practice of medicine.

FREDERICK STOHLMAN, JR., M.D.

Correlative Neuroanatomy and Functional Neurology, 6th ed. JOSEPH J. MCDONALD, M.S., M.ScD., M.D., Professor of Surgery, Columbia University; Attending Surgeon, Presbyterian Hospital, New York; Director of the Surgical Service, Francis Delafield Hospital, New York; AND JOSEPH G. CHUSID, A.B., M.D., Attending Neurologist, St. Vincent's Hospital, New York. Price. $4.00. Pp. 263, with 177 figures. Los Altos, Calif.: Lange Medical Publications, 1952.

This handbook had its first edition in 1938 and now, 14 years later, has appeared in a sixth edition. As the authors state, this volume is dedicated to the beginner in neurology. To this the reviewer would add, those looking for a "pony" in preparation for the American Board examinations. The book is very much more comprehensive than one would think, judging by its size. This has been accomplished by pruning the discussion to an austere outline form. While this is economical from a space point of view, readability is sacrificed.

The book is well filled with clear line drawings, excellently annotated. I think the most outstanding of these is a very lucid series in the chapter on Functional Tests of Principal Muscles wherein, by diagram, functions of all the major groups of muscles in the body are clearly presented.

In this new edition, roughly one third of the book is now devoted to clinical neurology or, better yet, the clinical application of neuroanatomy and neurophysiology. There is a short chapter on electroencephalography which presents the subject in capsule form. The chapter on X-ray examination is largely confined to the employment of contrast media in neuroradiology. Thereafter follow short chapters on infectious diseases, neoplastic, traumatic and degenerative diseases of the nervous system. Syncope, headache, aphasia and muscular disorders are similarly treated.

The appendix in this volume contains a fairly complete glossary of neurologic homonyms, many of them quite obscure. With a little diligent attention to this section almost anyone can astonish his colleagues with his erudition.

In order to sell at the low price of $4.00, the publisher undoubtedly has had to make certain concessions. One of these is a stiff paper cover and a plastic ring-type binder. This is not particularly objectionable because it is thus possible for the book to lie open and flat at any page and even be folded back upon itself without too great inconvenience. However, I object to the type face, which I find quite difficult to read. There is nothing particularly eye-catching about it. A more serious criticism, however, is the employment of a grade of paper which is transparent enough to show the drawings, photographs and type from the reverse page.

In comparison, however, to the true value of the book, these objections are minor and this text can be highly recommended to medical students, interns and residents in the field of neurology, and as a quick and accurate reference for settling neuro-anatomical disputes.

J. M. W.

JOSEPH ROZIER BIGGS, M.D.

(1882–1952)

Dr. J. Rozier Biggs, Life member of the District Medical Society, and an officer and medical director of many insurance companies, died, December 18, 1952, at his home, 1661 Crescent Place, N.W. He had been in ill health since his retirement from medical practice some three years ago.

Dr. Biggs was born in Washington, D. C., April 28, 1882, the son of Henry Rozier and Martha Slaven Biggs. He attended the Academy of the Sacred Heart. After receiving his degree in medicine from George Washington University in 1907, he interned at Children's Hospital. He served in the Surgery Clinic of Children's from 1909 to 1915.

During World War I Dr. Biggs was Chairman of the local Medical Draft Board. In the last 15 years his dominant interest was life insurance medicine. He was Vice President and Medical Director of the American Standard Life Insurance Company and of the International Electric Workers' Benefit Association. Other insurance companies he had served as medical director were Continental Life Insurance Company, now the Southland Life Insurance Company, and the Peoples Life Insurance Company. He had been Vice President of the Union Coöperative Life Insurance Company.

He was a member of the American Medical Association, the Hippocrates-Galen Society, an Active member of the Medical Society of the District of Columbia since 1910, and a Life member since 1951. He was founder and former President of the Columbia Country Club; former President of the Cosmopolitan Club, and originator of its Distinguished Service Medal, which is used by Cosmopolitan Clubs in this country and Canada. He himself received the medal in the 1930's. He also belonged to the Calvert Club, Knights of Columbus, Order of Alhambra, University Club, Oldest Inhabitants of the District of Columbia, the Washington Board of Trade, and the Lambs Club of New York.

Surviving are his wife, Mrs. Pauline Fox Biggs; a daughter, Mrs. Clair J. Killoran, of Wilmington, Delaware; and a brother, John G. Biggs, of Virginia.

CHARLES LOFTUS GRANT ANDERSON, M.D.

(1863–1952)

Dr. Charles L. G. Anderson, one of the oldest members of the District of Columbia Medical Society, died December 11, 1952, at Woodbury, New Jersey. He was a veteran medical officer of the Indian campaigns, the Spanish-American War, and World War I. He was 89 years old when he died.

Dr. Anderson was the son of a Lutheran clergyman, George Washington Anderson, and Anna Marie Winter Anderson. He was born near Hagerstown, Maryland, March 10, 1863. He attended Claverack College at Claverack, New York, from 1877 to 1879, then enrolled for premedical study at the University of Pennsylvania, completing his studies in 1881. In 1884 he graduated from the College of Physicians and Surgeons of Columbia University. He was house physician and surgeon at Jersey City Hospital the following year.

Most of Dr. Anderson's Army medical career was

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spent as surgeon with the United States troops. In field or post hospitals he was usually in command. He began his service as First Lieutenant and Assistant Surgeon in the Regular Army in 1886, assigned to Whipple Barracks, Arizona Territory. He served in the Apache Campaign under General Miles. He was Acting Assistant Surgeon with the Fifth Army Corps in the Santiago Campaign of the Spanish-American War in 1898; Major and surgeon with the U. S. Volunteers during the Philippine Insurrection in 1899–1901; and physician to the Isthmian Canal Commission in the Canal Zone of Panama, 1905 to 1907. As Major in the Medical Reserve Corps he served with the Second Division in France during World War I. He retired as Lieutenant Colonel in the Medical Reserve Corps in 1928. Following his retirement Dr. Anderson accepted a position with the Veterans Bureau. For a brief period, in 1905, he was affiliated with Emergency Hospital as associate in surgery.

He was a member of many organizations, including the American Medical Association, the Association of Military Surgeons of the United States, the Washington Academy of Sciences, the American Geographical Society, the United Spanish War Veterans, and the American Legion. He was elected a member of the Medical Association of the District of Columbia in 1902 and of the Medical Society in 1908, retaining Active membership in the Society until 1938, when he transferred to Associate. He was also a member of the University Club of Washington and the Army-Navy Club of New York.

Dr. Anderson was author of several books, including "Old Panama and Castilla del Oro" and "Life and Letters of Vasco Núñez de Balboa."

In Washington he last resided at 2407 15th Street, N.W.

HOWARD LEE SMITH, M.D.

(1898–1952)

Dr. Howard Lee Smith, well known Washington surgeon, died, December 31, 1952, at Suburban Hospital, Bethesda, Md., after a brief illness. He lived at 3605 Chevy Chase Lake Drive, Chevy Chase, Md.

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A native Washingtonian, Dr. Smith was the son of the late Charles Edward Smith and Ollie Via Smith, who survives him. He attended Central High School and Emerson Institute. After graduating in medicine from George Washington University in 1926, he interned and received his surgical training at Emergency Hospital. He remained on the surgical staff of Emergency Hospital until 1934; he also served on the surgical staffs of George Washington, Gallinger Municipal, and Doctors hospitals. From 1927 to 1934 he taught surgery on the George Washington Service at Gallinger Hospital. During World War II he was a Selective Service examiner.

Dr. Smith was a Fellow of the American College of Surgeons and a member of the American Medical Association, the International Medical Club, the Washington Academy of Surgery, the Kober Society, George Washington University Medical Society, and an Active member of the Medical Society of the District of Columbia since 1928.

An active golfer, he was golf champion of the Congressional Country Club in 1937 and 1942. He was a 32nd degree Mason, belonging to the Scottish Rite Consistory, a past master of Cathedral Lodge, No. 4, F.A.A.M., and a member of the Shrine. He was also a member of the Columbia Country Club.

His wife, Mrs. Jean Goss Smith, survives him, together with two young children, Howard Lee, Jr., and Diana Porter. He is also survived by his mother, who lives in Takoma Park, Md., and two brothers, Harry E. Smith, of Washington, and Walter C. Smith, of Silver Spring, Md.

Report of Delegates to the AMA Clinical Session

(*Continued from page 101*)

MISCELLANEOUS

The House of Delegates approved a resolution presented by Delegate Ramsey of our Society that the Board of Trustees of the AMA investigate the existing problems in the field of malpractice insurance for physicians.

Among other things, the House managed to avoid an executive session; approved almost all of the voluminous reports of the Board of Trustees, Councils, special committees; heard about the arrangements for coming sessions—New York (June, 1953), St. Louis (December, 1953), San Francisco (June, 1954), Miami (December, 1954).

Respectfully submitted,
HERBERT P. RAMSEY, M.D., *Delegate*
HUGH H. HUSSEY, M.D., *Delegate*
THEODORE WIPRUD, *Secretary*

MEDICAL ANNALS
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ACUTE HYPOTENSION AND CEREBRAL HEMODYNAMICS

A Preliminary Report[*]

FRANK A. FINNERTY, JR., M.D.
Chief of Vascular Research, Georgetown Medical Division, Gallinger Municipal Hospital, Washington

LLOYD WITKIN, M.S.
Research Fellow, National Institute of Mental Health, United States Public Health Service

JOSEPH F. FAZEKAS, M.D.
Chief of Staff, Gallinger Municipal Hospital

THE recent reports[1-4] of deliberately inducing hypotension with methonium compounds to minimize bleeding during surgical procedures have raised many questions regarding the adequacy of the cerebral circulation under such conditions. In an attempt to answer some of these questions the present investigation was undertaken.

Cerebral hemodynamics and metabolism were studied in normotensive and hypertensive subjects before and during the induction of hypotension with intravenous hexamethonium.[†] Scheinberg and Stead's modification[5] of Kety and Schmidt's procedure[6] for the determination of cerebral blood flow (CBF) was applied in this study. Mean arterial blood pressure (MAP) was obtained directly from the femoral artery with a damped anaeroid manometer. Continuous electrocardiograms were recorded before and throughout the experimental period. Control studies were obtained after the patient had been tilted (head up) 30 to 40 degrees for a period of at least 30 minutes. The subjects were then given, while in the same position, a 1 per cent solution of hexamethonium intravenously at the rate of 1 mg. of the ion per minute. The mean arterial pressure was gradually reduced and the subjects carefully observed for signs of cerebral ischemia and peripheral vascular collapse. These were characterized by perspiration, cold clammy skin, yawning, somnolence, slurring of speech, nausea, and occasionally convulsions. When the above signs became manifest the subject's blood pressure was rapidly elevated by lowering the head of the table. In this way the cerebral circulation could be maintained just above the "critical level" for any particular individual. The second or experimental flow was performed under these conditions.

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[*] This investigation was supported by a research grant (PHS H-556C3) from the National Heart Institute of the National Institutes of Health, Public Health Service, and by a research grant from the United Cerebral Palsy Foundation.

[†] Supplied through the courtesy of E. R. Squibb and Sons, New York, N. Y.

The data thus far obtained are presented in table 1. They demonstrate that under acute conditions in the unanesthetized patient there is a significant reduction in cerebral blood flow attendant upon a fall in mean arterial pressure. Of greater significance, however, is the finding that in this group of patients (3 with malignant hypertension, 5 with normal blood pressure, and 3 with hypertension, non-malignant) there was a relatively critical rate of cerebral blood flow at which signs and symptoms of cerebral ischemia became manifest. This level ranges between 23.9 and 45.8 c.c. of blood per minute per 100 Gm. of brain with a mean average of 35 c.c. The results are consistent and seem to be independent of the age of the patient and status of the vascular tree previous to the induction of acute hypotension.

TABLE 1

Effects of Acute Hypotension on Cerebral Circulation

PATIENT	AGE	CBF*		% FALL CBF	MFAP		% FALL MFAP	SIGNS AND SYMPTOMS
		C	E		C	E		
1	33	46.0	27.0	39	185	107	42	Yawning, drowsiness, perspiration, cold skin
2	39	59.6	39.0	34	178	107	39	Yawning, slurred speech, perspiration
3	41	62.6	39.7	36	185	118	36	Drowsiness, much perspiration, slurred speech
4	36	65.7	45.8	29	84	66	21	Fatigue, perspiration
5	59	41.5	34.8	16	72	35	51	Generalized convulsions, 15 sec., fatigue
6	46	36.8	23.9	33	100	56	44	Perspiration, yawning, Cheyne-Stokes respiration
7	42	43.1	31.9	25	106	38	64	Generalized convulsions, 10 sec., yawning, drowsiness, slurred speech
8	66	54.9	32.5	40	180	65	63	Yawning, perspiration
9	68	43.3	35.4	18	156	68	56	Yawning, perspiration, slurred speech
10	54	59.1	31.3	47	155	68	57	Sweating, weakness, nystagmus
11	47	52.1	36.5	25	106	60	64	Sweating, weakness

* CBF signifies cerebral blood flow in c.c./min./100 Gm. of brain; MFAP, mean femoral arterial pressure in mm. Hg; C, control observation; E, experimental.

In the group as a whole, no such critical level for mean arterial pressure can be established. In the subjects with malignant hypertension (nos. 1, 2, 3), manifestations of cerebral ischemia became evident when the mean femoral arterial pressure was reduced to accepted normal limits (100 to 110 mm. Hg). In addition, there appears to be a definite relationship between per cent fall in cerebral blood flow and per cent fall in mean arterial pressure.

The "critical" mean femoral arterial pressure for the other subjects (normotensive and non-malignant hypertensive patients) seems to be between 30 and 40 mm. Hg. In none of the patients studied was there clinical or electrocardiographic evidence of coronary insufficiency during the study.

A much larger series of cases and more intensive investigation are needed, of course, before definite conclusions can be made. These preliminary observations suggest the following: (1) Acute reduction of blood pressure results in a significant decrease in cerebral blood flow; (2) there seems to be a critical level of cerebral blood flow at which signs and symptoms of cerebral ischemia become manifest; (3) the critical mean femoral arterial pressure at which cerebral ischemia becomes manifest varies considerably. In

(*Continued on page 167*)

TREATMENT OF DYSMENORRHEA WITH A DIOXOLANE

A. EARL VIVINO, M.D.
Instructor in Medicine and Medical Director of Health Service, Georgetown University School of Medicine and Hospital

GRETCHEN RITTER, B.A.
Research Assistant, Georgetown University School of Medicine

IT HAS been estimated that about one third of all women in America are afflicted with primary dysmenorrhea producing a loss of approximately 140 million hours annually, representing an entire year of work by approximately 58 thousand women.[1] The therapy of dysmenorrhea has been based upon the relief of symptoms. In a study of an individual case one is struck by the multiplicity of subjective symptoms involving many systems, primarily genital but also including the gastrointestinal, central nervous, cardiovascular, and urinary systems. In evaluating the subjective symptoms of pain there is such a tremendous psychologic factor that a great many types of therapy, even with controls, have been successful with the majority of the patients in a given series. These treatments include psychotherapy, hypnosis, physical exercise, the use of antispasmodics, sympathomimetics, analgesics, hypnotics, antihistamine drugs, placebos, anti-allergens and endocrines (estrogen, progesterone, testosterone, pregnant mares' serum, thyroid), dilation of the cervix, the use of stem pessaries, and presacral sympathectomies. Unfortunately, the good results obtained by the primary investigators can seldom be duplicated by other men in the field.

Most, if not all, of these treatments have been directed toward changing an underlying condition which has been considered causative. Bickers[2] feels that the primary pathology of dysmenorrhea is muscular contraction in the presence of anoxia. Spasmolytic drugs should have some beneficial effect on dysmenorrhea on the assumption of the association of menstrual pain with spasmodic contractions of the uterus. Spasmolytic drugs such as the simple monoethers of glycerol (mephenesin) have a sedative and tranquilizing general effect. The pharmacologic characteristics described for the monoethers of glycerol are also present in a series of 2-substituted-4-hydroxymethyl-1,3-dioxolanes, and according to Berger et al,[3] 2,2-diisopropyl-4-hydroxymethyl-1,3-dioxolane (Dimethylane) possessed a greater margin of safety and activity than mephenesin.[4] Boines[5] and Horoschak (1951) reported a study of 19 cases of primary dysmenorrhea treated with Dimethylane in which excellent results were noted in 13 out of 19 patients.

It is the purpose of this paper to report response to Dimethylane in 66 cases of primary dysmenorrhea.

MATERIALS AND PROCEDURE

Ninety-six female patients, ranging in age from 18 to 25, with complaints indicating primary dysmenorrhea were selected for this study. A complete history was obtained from each patient, and a thorough physical examination was made to exclude any organic lesion. Complete blood counts and urinalyses were made at regular intervals. All these patients have had dysmenorrhea since the onset of menses, and all previously have had therapy consisting of coal tar analgesics and caffein or ephedrin. All have required small doses of codeine at one time or another for severe dysmenorrhea. All patients had lost at least a day from usual activities because of severe dysmenorrhea.

Patients used in this study were divided into 3 groups. One group of 36 was given 250 mg. Dimethylane* 4 times a day beginning 3 days prior to the onset of menstruation. Another group of 30 was given 250 mg. 4 times daily at the onset of menstruation. Dimethylane was continued throughout menstruation in both groups, and this same procedure was repeated each month for 4 months. A third group of 30 patients was used as controls.

RESULTS

The following table gives the results of treatment:

GROUP A: 250 mg. Dimethylene 4 times daily beginning 3 days prior to menstruation until the end of the period.

Total No.	*Excellent*	*Good*	*Fair*	*No Results*
36	10	20	6	0

GROUP B: 250 mg. Dimethylane 4 times daily from onset of menstruation through the end of the period.

Total No.	*Excellent*	*Good*	*Fair*	*No Results*
30	8	17	5	0

GROUP C: Controls—given placebos 4 times daily from onset of menstruation through the end of the period.

Total No.	*Excellent*	*Good*	*Fair*	*No Results*
32	2	6	5	19

By excellent results is meant freedom from cramps and backaches. Good results meant a considerable reduction in intensity of cramps and backache. Fair results meant alleviation of mental and physical discomfort but continuation of mild cramps and backache

The results seem to indicate that 18 patients out of 66 had excellent results with Dimethylane, 37 out of the 66 had good results, 11 out of 66 had fair results. While on Dimethylane none of the patients lost time from usual activities. No toxic reactions attributable to the drug were observed in any case.

This means that 27 per cent of those given the drug showed excellent results and 56 per cent of them good results. Seventeen per cent of the patients had fair results. There is no appreciable difference between this over-all percentage result and the individual percentages obtained in groups A and B. Groups A and B did not at any time deviate from each other more than 1 per cent.

The effect of the drug was manifested within an average of 30 minutes, and lasted for 3 to 4 hours.

DISCUSSION

Certain simple monoethers of glycerol, such as mephenesin, have been shown to cause a paralysis of voluntary skeletal muscles without embarrassment of respiration. In small doses these substances have a controlling influence on various types of tremors and other involuntary movements as well as a relaxing effect on spasm, spasticity and rigidity. The characteristic therapeutic effects of the glycerol ethers are also obtained from the 2-substituted-4-hydroxymethyl-1,3-dioxolanes. Recently a new drug of the latter series, 2,2-diisopropyl-4-hydroxymethyl-1,3-dioxolane, or Dimethylane, has been used for the same purpose as the glycerol ethers. This drug has a relaxing effect and, when given in large enough doses, a paralytic effect. Although its effects on the central nervous system are quite similar to those of mephenesin, the dioxolanes seem to possess a wider margin of safety and a greater range of activity. (This activity appears to depend on the position and number of alkyl groups attached to the second carbon atom and the presence of the hydroxyl radical.)[3, 4]

The muscle-relaxing properties of the dioxolane used may be responsible for the results in patients with dysmenorrhea, since it has been suggested that varying organizations of uterine contractions cause the pressures resulting in the symptoms present in dysmenorrhea.[1, 2] Dimethylane and other spasmolytic agents also produce a tranquilizing or sedative effect which may be responsible for the relief of the symptoms in dysmenorrhea.

SUMMARY

1. Sixty-six female patients, ranging in age from 18 to 25, with complaints indicating pri-

(*Continued on page 167*)

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* Supplied through the courtesy of National Drug Company, Philadelphia, Penna.

THE RELATIONSHIP OF GASTRIC ULCER TO GASTRIC CANCER*

GEORGE T. PACK, M.D., F.A.C.S., *Moderator*
Clinical Professor of Surgery, New York Medical College; Attending Surgeon, Memorial Hospital for Cancer and Allied Diseases

AUBREY O. HAMPTON, M.D., F.A.C.R.
FERDINAND C. HELWIG, M.D., F.A.C.P.
LOUIS A. M. KRAUSE, M.D., F.A.C.P.
WALTER L. PALMER, M.D., F.A.C.P.
CAPTAIN ROBERT B. BROWN, M.C., U.S.N., F.A.C.S.
MOSES PAULSON, M.D., F.A.C.P.
Panel Participants

Dr. Pack: The subject of today's discussion is a controversial and perhaps hackneyed one. The panel represents surgery, radiology, pathology, internal medicine, gastroenterology, and gastroscopy. These various subjects all pertain to the study of gastric ulcer and gastric cancer. We have not been concerned with duodenal ulcer. It will be considered only incidentally, as it has to do with differential diagnosis.

It seems to me that this problem resolves itself into 3 phases: (1) differential diagnosis, which is based on clinical, radiographic, gastroscopic, clinical and laboratory diagnostic aids, (2) the etiology of both lesions, and (3) the moot subject, whether or not a cancer of the stomach can develop on a preëxisting benign gastric ulcer.

The nature of the stomach and its enzyme are responsible for the confusion in our knowledge about gastric ulcer and gastric cancer. Perhaps there is no analogous situation in the body, with the exception of periampullary cancers, in which peptic ulceration and digestion are not involved. Ulceration follows cancer of the lip, tongue, larynx, esophagus, colon and rectum. Per contra, ulceration is the precursor of some cancers, such as those that occur in the scars of burns and in chronic sinuses.

Before I begin to propound the questions in which the panel will participate, we must make certain that our panel members all mean the same thing when they speak of a benign or simple ulcer, a carcinomatous ulcer, and an ulcer in carcinoma. I shall ask Dr. Brown, our surgeon, to speak first.

Dr. Brown†: It may seem somewhat presumptuous for a clinician to start with a diagnosis in the field of pathology, but from my standpoint it is primarily important to know whether a given ulcerating lesion is benign or malignant. On the other hand, for this particular discussion, we should make an attempt to define clearly what difference is implied in the terms "ulcerating carcinoma" and "carcinomatous ulcer." I think that the term "ulcerating carcinoma" should be restricted to the lesion that is obviously a carcinoma that has ulcerated, the ulceration being located primarily in carcinomatous tissue. On the other hand, "carcinomatous ulcer" should be defined as a lesion that may or may not be benign so far as its gross appearance is concerned, but which on histologic examination tends to contain carcinoma surrounding it or at least in one of its borders.

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* The material in this article is taken from a symposium on this subject presented at the Twenty-third Annual Scientific Assembly of the Medical Society of the District of Columbia, September 29, 1952. This discussion is being published in two parts, of which this is the first; the second will appear in the next issue of the Annals.

† Chief of Surgery, United States Naval Hospital, Bethesda, Md

Dr. Pack: Let us agree then that an ulcer in a carcinoma or an ulcerating carcinoma, as defined by Dr. Brown, means a preëxistent carcinoma which becomes ulcerated and that a carcinomatous ulcer means a carcinoma developing in an ulcer, which is of questionable occurrence. Dr. Krause, what is the relative incidence of duodenal ulcer, gastric ulcer and gastric cancer?

Dr. Krause*: Over a large period of time we see clinically more duodenal ulcers, but at autopsy we see many more gastric ulcers. By gastric ulcer I include the little petechial lesions that we see so frequently associated with diseases other than those of the stomach itself. Duodenal ulcers are more common clinically, however, because they are usually chronic, but I believe that the gastric ulcer is far more frequent in occurrence than we realize because it heals rapidly, probably regardless of what we do.

Dr. Hampton:† Radiologists see them of course in the living, and they have generally agreed that duodenal ulcer is from 4 to 7 times as common as gastric ulcer.

Dr. Brown: I will perhaps confuse the issue a little by giving statistics from a hospital which treats primarily service personnel but also dependents. Clinically, among 100 patients coming to the hospital with any one of these 3 lesions, 83 will have duodenal ulcers, 13, gastric ulcers, and 4, gastric carcinomas. In the pathology department, on the other hand, if the latter 2 lesions occur in 100 consecutive cases, 66 will be benign gastric ulcers and 33 gastric carcinomas.

Dr. Helwig‡: My experience has been chiefly in the department of surgery and the "dead house." The 3 lesions are about equal in our material at necropsy.

Dr. Palmer§: Will Dr. Brown please repeat the last statistics he gave on necropsy? He did not have any duodenal ulcers at all at necropsy.

Dr. Brown: These were surgical pathology specimens. I should have been more specific. The reason I didn't include duodenal ulcers is that, as you know, in a lot of these specimens the duodenal ulcer is not there when the specimen arrives in the laboratory. It was a 2 to 1 ratio, i.e., 66 benign gastric ulcers and 33 gastric carcinomas.

Dr. Pack: Of course, as we analyze this, we can make a comparison on the basis of the incidence of these diseases as we find them in the living subject, who is to be treated. That's one method. The next is, as they come to the surgeon, i.e., the surgical specimens, and, finally, as they die, the necropsy lesions, all different statistically.

Dr. Hampton: I think the radiologist includes the scar of a duodenal ulcer in his statistics, whereas the pathologist does not. That would explain part of the discrepancy. The radiologist never sees the incidental erosion. That is said to occur in 30 per cent of all post mortems. They are not gastric ulcers, and I don't think we need to concern ourselves with them. I believe that carcinoma of the stomach and gastric ulcer are about equal and that ulcers of the duodenum and scars of ulcers of the duodenum are 4 to 7 times as common as either. I also believe that ulcer and cancer of the stomach are just about as common as the hospital or clinic will admit a case of lymphoma. We think lymphoma is a very uncommon disease, but ulcer of the stomach is just about the same. At the Massachusetts General I know it is the same.

Dr. Pack: On the basis of those dying, of course, gastric cancer far exceeds this cause of death and that is to be expected. There are between 26,000 and 30,000 deaths every year due to gastric cancer, between 4,000 and 5,000 deaths due to gastric ulcer, and about 3,000 deaths due to duodenal ulcer, but I think the larger figures for gastric is because more patients with gastric ulcer are operated upon.

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* Associate Professor of Medicine, University of Maryland School of Medicine.

† Attending Radiologist, Garfield Memorial Hospital, Washington, D. C.

‡ Clinical Professor of Pathology and Oncology, University of Kansas School of Medicine.

§ Professor of Medicine, University of Chicago School of Medicine.

Dr. Palmer: It sounds to me as though Dr. Hampton was telling of something that we should have heard earlier this morning, namely, that lymphoma is much more common than we appreciate.

Dr. Pack: In other words, in the living subject that is run through a general diagnostic clinic, it is admitted that duodenal ulcer is by far the most frequent of the 3, having a ratio as high as 7 to 1 and in some cases 10 to 1. Our figures at the Memorial Hospital, which is a cancer institute, vary from those of Dr. Brown because we see more cancers of the stomach than we do gastric ulcers, and that happens in other clinics too. In other words, there is some support for the idea that gastric ulcer rather than gastric cancer is less frequent as you encounter it surgically. That is not true in postmortem figures.

The next question is, "Does the age of the patient influence the relative incidence of ulcer in cancer of the stomach?" These questions are put as individual questions, and we must realize that we are not attempting to draw conclusions on the basis of the one answer. We must take the entire or composite picture in the end.

Dr. Krause: My impression is that age does have an influence. I feel sure that ulcer is what I think of first in the younger age group, and cancer in the older age group.

Dr. Palmer: I would like to disagree with Dr. Krause. I don't know the statistics, but I just don't take age into consideration at all anymore.

Dr. Pack: Not in the individual which you talked about a moment ago, but in a group, what is your general impression?

Dr. Palmer: Well, it may be, but benign ulcer is very common in the aged, and cancer is not too rare in the young.

Dr. Brown: I feel essentially the same as those who have expressed it, that as a group, age does influence the diagnosis, but when you find larger series that have actually been broken down into average ages, there are several that seem to show that the average age for both groups is about 50 years.

Dr. Pack: Well, I believe that the confusion in the past about this has been due to the inclusion of duodenal ulcer which occurs at an earlier average age, but our figures from Memorial Hospital agree that our patients with gastric ulcer and gastric cancer have the same average age, and therefore the age of the patient is not helpful to us in the consideration of the individual patient.

Dr. Helwig: May I ask, Dr. Pack, if it is not true that they treat cancer almost exclusively at the Memorial Hospital?

Dr. Pack: Yes, that is true, and that's why I say my figures may be prejudiced. I will say this, though, that in the Gastric Clinic we never turn away any patient with an ulcerative defect in the stomach, nor do we cease to follow and observe indefinitely all patients that have achylia gastrica and anacidity, but I submit that those patients are not referred to us by physicians unless the physician suspects the presence of a cancer. I will probably interrupt occasionally to give some of our own figures, bearing in mind that they do come from a cancer institute and do not represent the findings occurring in a general hospital, which I think is just criticism as regards statistical data on these facts. Now, does the size of the gastric ulcer influence the diagnosis of a benign or malignant lesion?

Dr. Hampton: No.

Dr. Palmer: I can't quite let that ride. You didn't mean it, Dr. Hampton?

Dr. Hampton: In a specific case it is of no value.

Dr. Palmer: I can't agree with that. Now for instance, there are in the records a few cases of benign ulcer of the greater curvature of the stomach, but if you had an ulcer down on the greater curvature . . . .

Dr. Pack: Now let's not talk about the location, Dr. Palmer, only the size. What do you think about the size of the ulcer?

Dr. Palmer: I'll go along with the size idea.

Dr. Paulson*: Size is no determining factor as to the benignity or the malignancy of the ulceration.

Dr. Krause: I'll agree with the size statement.

Dr. Brown: In the individual case, I agree.

Dr. Pack: Well, am I the only one who disagrees?

Dr. Helwig: Are you talking about the over-all picture, Dr. Pack, or the individual case?

Dr. Pack: We are talking about the over-all picture, Dr. Helwig. We are speaking in generalities now of cases as a whole, that is, in a large series. What is the average expectation within the series, not in the individual patient, regardless of the location?

Dr. Helwig: I think we all have a tendency perhaps to remember specifically the large ulcers of the greater curvature which were quite innocent in character. I believe, however, that, if you take a large series of cases, the larger the ulcer, the greater the chance of it being malignant; at least that's been my experience.

Dr. Pack: That has been ours too, and we have statistical data to back that up in our cases. There are exceptions. We have a few minute ulcerative lesions that are carcinomatous. We have had some huge ulcers that were benign, a fact which, of course, would refute any attempt to establish a rule; but, if we take the series and measure the ulcers, certainly the larger the ulcer, the higher the percentage of malignant tumors occurring within. With ulcers measuring 1, 2, 3, and 4 cm. in diameter, the percentages of cancer are about 6, 8, 13 and 25, based on a fairly large series of cases in our experience.

The next question which you have all been yearning to answer is, "Does the location of the ulcerating lesions suggest the possibility of cancer?"

Dr. Brown: Yes, it does. It has already been stated that ulcers of the greater curvature are, in a high percentage of cases, malignant. Also, ulcerations in the cardia are in a fairly high percentage of cases malignant, and I use the word "fairly" because I don't believe the percentage is as high as on the greater curvature. I am very confused in choosing between benignancy and malignancy when it comes to ulcers of the lesser curvature and the prepyloric region, in which most of our benign ulcers and also most of our cancers occur.

Dr. Hampton: (Lantern slide is presented showing the outlines of a stomach with a scatterogram showing location of various lesions.) I think it was about 20 years ago that this slide was produced in an effort to determine this question. On this lantern slide are 128 ulcers and 128 cancers. To be sure, they were not localized very carefully by the surgeon or the pathologist, because no one was particularly interested in where they were. One error is the number of cases, and the other is my own personal error. There may be still another, namely, the histologic error. When the study ended, however, by carefully restricting the prepyloric area to a very specialized zone of 1½ inches and excluding all lesions not involving the pylorus, we had a very particular spot. It has already been shown that benign gastric ulcers are very rare in the prepyloric area and to find an ulcer in this one particular spot 1½ inches long would make it even more rare. By doing it this way we found that only 2 or 3 per cent of them occurred in this area. We waited for 3 years to see what would happen if we resected all of them in this area. Twenty-three were resected and all proved to be cancer. We specified at that time that these ulcers must be studied histologically by serial sections. Since then no one has done that as far as I know, and since then the publications have shown benign ulcers in this area, but when the radiograms were demonstrated they were not even in that area. The point that I am trying to make is that in the antrum it is more difficult to demonstrate the gross pathology than elsewhere. In this part of the stomach resection is simple, and at the time of this study resection of the stomach for gastric ulcer was not at all common. In fact, I discovered that 9 cases had had posterior gastroenterostomies, and they proved to be cancers. Since that time no more gastroenterostomies have been done for cancers.

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* Assistant Professor of Medicine, Johns Hopkins University.

Dr. Pack: If you will leave that slide on for just a moment you will remember that Dr. George Holmes of the Massachusetts General Hospital found as high as 70 per cent cancers in the prepyloric segment. You will notice how few ulcers Dr. Hampton showed in his slide in this location, i.e., the prepyloric segment, and yet other statistics presented show less than that, in ours, for instance, 25 per cent. I also notice in your charts the preponderance of the benign ulcer near the incisura and the relative infrequency of cancer there, which is a general rule that we follow. That is perhaps one spot in the stomach where an ulcerative lesion is least likely to be carcinomatous.

Dr. Helwig: I think that as far as the greater curvature is concerned you might say that practically all of them are carcinomatous and that possibly 65 per cent in the prepyloric area are also; at least, that's been my experience.

Dr. Pack: You remember that Wertheim, the celebrated pathologist, said, "The closer you get to the cardia, the greater the chances are that the ulcer is benign," but that has not been our experience. We have over 50 per cent up near the cardia. I would like to have each of you answer this question if you can, as near as you can remember, "Have you ever seen a benign ulcer on the greater curvature?"

Dr. Paulson: No, I have not.

Dr. Brown: I have seen 1.

Dr. Hampton: One, and he had a 4-plus Wassermann.

Dr. Krause: I have not.

Dr. Palmer: I have seen 2, and they had negative Wassermanns.

Dr. Helwig: I have seen 2. One, which perforated, was in an acromegalic and the other was in a very aged gentleman, both with negative Wassermanns.

Dr. Pack: I have seen only 2 in our gastric service at Memorial Hospital. It is evident that in the combined experience of these 7 people, less than 10 cases of a benign ulcer on a greater curvature have been seen. At least we can make the general rule that one must suspect cancer on the greater curvature unless proven otherwise. Apropos of this discussion, I would like to ask, "Does the location of the ulcer in the stomach, therefore, influence the choice toward selection of treatment?" If it were on the greater curvature, I assume all you gentlemen would advocate surgical intervention. What about the cardiac end of the stomach?

Dr. Brown: I think I would apply the same criteria to the cardiac end of the stomach as to the remainder of the stomach. I am sure you will bring that out in further discussion. To state my point more clearly, I would operate on an ulcer on the greater curvature as diagnosed. In the other regions, although recognizing that the ulcer at the cardiac end of the stomach has a good chance of being malignant, it also is in one of the worst places to try to treat an ulcer surgically that is benign. Therefore, I would apply the criteria that we will discuss later.

Dr. Paulson: I am in general agreement with Dr. Brown in the matter. As a general rule, if the lesion is on the lesser curvature of the stomach and does not involve the antrum, I am inclined to approach it conservatively at first.

Dr. Krause: I would agree with that, except that our feeling about the cardia likewise has changed in the last few years. Ulcers there are more apt to be neoplastic. We believe, therefore, that they deserve investigation surgically as do all the lesions on the greater curvature. I hedge on the others for a while.

Dr. Pack: Does the duration of symptoms offer diagnostic aid or influence the choice of treatment in the case of an ulcerating lesion in the stomach?

Dr. Paulson: I would say that if an individual had symptoms for many months or a year and the lesion were properly located, i.e., not in the antrum and not along the greater curvature of the stomach, I would be inclined to think that it was probably benign. However, I would be most influenced, not so much by time, but by the location of the lesion. I would be willing to treat the patient conservatively if the lesion were located along the lesser curvature of the stomach.

Dr. Brown: I would say yes from the standpoint of diagnosis. I would say no from the standpoint of treatment. I think, on the percentage basis of location to which we are adhering, that, if these symptoms are of long duration, the lesion is more apt to be benign. If the lesions are of short duration, the chances of malignancy are greater, but I do not believe that the differentiation is strong enough to allow us to base our treatment on that point.

Dr. Pack: That has certainly been our observation also. Seventy per cent of our patients with ulcerating lesions of the stomach with symptoms of less than a year's duration have gastric cancer, and I think only 20 per cent of those whose symptoms have been more than a year, between 1 and 2 years, had gastric cancer.

Dr. Palmer: I suspect that your material is a little bit weighted in favor of cancer, which would throw those statistics a bit off. I think that benign ulcer, particularly in the older age group, with a short duration of symptoms, is more common than suggested by your figure.

Dr. Pack: Yes, I think that is true. Those are the figures in a cancer hospital. The next question is, "How frequently does the ulcer syndrome occur in cases of indisputable gastric cancer?"

Dr. Krause: I think that it is not so common. Gastric cancers that we see, particularly in men, usually start out in the "blue." They do not have a very long story. I believe that in women there may be a little longer story, but, there again, what they may call symptoms may be referred to other organs.

Dr. Palmer: I think it is a matter of what one means by an "ulcer story." If you start out with the definition of an "ulcer story" as one characterized by chronicity and periodicity expecting an average duration of symptoms, as is the case as a rule in duodenal ulcer, of approximately 7 years, obviously one does not obtain that story with gastric cancer. If one refers only to the time relationship of the distress, time relationship to food-taking, then I think it is not so uncommon. I agree with Dr. Krause that the majority of the patients do not give such a story and that the great majority start out in the "blue" just as he indicated. But it is not too uncommon to have the patient give a story of no distress in the morning before breakfast but pain coming on 1 to 2 hours after eating, relieved by food-taking or relieved by antacid on through the day. Pain at night, I think, is much less common; but the characteristic relationship of pain to food-taking certainly occurs with cancer, and one may be fooled in the diagnosis by putting the patient on ulcer management and getting complete relief of the distress.

Dr. Pack: That was the point that I wanted brought out. What you say is particularly of the ulcerative lesions rather than the polypoid lesions, is it not?

Dr. Palmer: Yes. I might add that from my point of view, the mechanism of pain in these ulcerating gastric lesions is essentially the same as it is in benign ulcer.

Dr. Brown: I agree with Dr. Palmer.

Dr. Pack: Discuss the significance of the change in symptoms as related to the possible development of cancer of the stomach.

Dr. Palmer: My own experience has been that it occurs quite infrequently. As Dr. Krause emphasized, the story in gastric cancer usually comes out of the "blue," and the symptomatology in benign ulcer can change for a variety of reasons without the lesion being neoplastic, both in duodenal ulcer as well as in gastric ulcer. My personal opinion is that that feature is not of significance.

Dr. Krause: In internal medicine we see

many people who have "stomach complaints," and I am sure you practitioners do too. The radiologists see one group and Dr. Palmer's group see another, but many of those patients have been screened before they arrive there. They are essentially "stomach" cases, and the surgeon notoriously sees the patient after he has been culled for the most part and studied. The general man bears in mind that the stomach is perhaps the biggest liar in the body, that one sees a lot of things, such as the cardiac patient who has had "indigestion" for a long time, or the real gallstone patient who has dyspepsia. We all see cases of "indigestion," or whatever you may term it, and sort them in the early stages, ruling out cardiac disease, renal stones, etc., and separating out the cases of real indigestion due to gastrointestinal lesions.

Dr. Pack: Of course, we are assuming that all these patients have an organic lesion of the stomach. The problem here is not whether the disease is located intrinsically in the stomach or external to it and producing symptoms through the stomach, and so it is assumed that in this question the patient actually had a defect in the stomach and this change in symptoms. The question was intended to convey whether that had any significance to us in helping to arrive at a differential diagnosis.

The next question is, "What is the significance of hemorrhage from ulcerating gastric lesions? How does it influence treatment?"

Dr. Paulson: The initial symptoms in gastric cancer may be initiated by hemorrhage at times, but certainly it is rare, or relatively rare. It may sometimes be a terminal manifestation due to the ulcerating neoplasm having eroded into a sclerotic vessel. Hemorrhage in gastric cancer is much less frequent than it is in gastric ulcer. From the endoscopic standpoint, we are interested in the lesions which might result in hemorrhage that the radiologist would have difficulty in encountering, such as superficial erosions or acute ulceration, various forms of gastritis, polypi which he may sometimes be unable to detect, and gastric varices.

Dr. Brown: I think we must define whether we are talking about microscopic or gross hemorrhage.

Dr. Pack: We are referring to gross hemorrhage.

Dr. Brown: In our experience gross hemorrhage is commoner in benign lesions than in ulcerative malignant lesions. I do not believe this should influence treatment. It is understood, of course, that if the bleeding is massive and uncontrolled emergency operative treatment is required in either case.

Dr. Pack: If the patient had an initial hemorrhage without much in the way of antecedent symptoms, would you be more inclined to consider it of ulcer origin rather than cancer?

Dr. Brown: Yes.

Dr. Pack: Is that the consensus of the panel? It is found more frequently with ulcer than with cancer—in our series, 20 per cent with gastric ulcer and 6 per cent with cancer. We had only 3 fatalities with gastric hemorrhage in 1,000 consecutive cases of cancer of the stomach. It has not been a common cause of death.

Does gastric ulcer occur without pain?

Dr. Palmer: Yes. So does duodenal ulcer.

Dr. Krause: Yes. I agree with that.

Dr. Brown: Yes.

Dr. Pack: That is a minor point perhaps, but it is often overlooked.

What is the diagnostic significance of gastric acidity in distinguishing between gastric ulcer and gastric cancer?

Dr. Brown: We are once again speaking on a basis of percentages. I will speak in terms of achlorhydria instead of degrees of acidity. The frequency of achlorhydria is probably twice as great in gastric cancer as in normal individuals of the age group at which cancer is most frequently found. It is certainly many times more frequent in gastric cancer than in gastric ulcer.

Dr. Helwig: Dr. Palmer partially answered the question with one of his slides this morning. He demonstrated that cancer of the stomach actually had a higher degree of acidity in the over-all picture than did gastric ulcer, but anacidity, however, is an entirely different story.

DR. PALMER: I would summarize it with this simple statement: If acid cannot be demonstrated with a gastric lesion, one had better remove the lesion.

DR. PACK: What would be the percentage of normal males in the period of 60 to 64 years of age that would have anacidity?

DR. PALMER: I don't remember exactly. I would say at least 20 per cent.

DR. HELWIG: It is reported as high as 30 per cent in some clinics.

DR. PAULSON: Bloomfield and Pollard give it as 10 per cent for the general population.

DR. BROWN: I think we should point out that there are many different ways of listing anacidity and that the figures are apt to vary depending upon how it is tested.

DR. PACK: Using histamine tests, we found 10 per cent in our own group, i.e., normal males, aged 60 to 64.

What is the incidence of hyperacidity in patients with cancer of the stomach, or do you encounter it?

DR. PALMER: Yes, one encounters it, but it is very rare. I can recall only 2 or 3 patients in a rather long series with what I would call a hyperacidity. I mean by that, an excessive fasting secretion. Good responses to histamine, up to 90 to 100 clinical units, may occur, but they are not common either.

DR. PACK: What percentage of patients with benign gastric ulcer will have anacidity?

DR. PALMER: None will have complete anacidity.

DR. PACK: I mean in response to histamine.

DR. PALMER: None; that's what I mean also.

DR. PACK: In our series it was 8 per cent.

DR. PALMER: You did not do your tests properly.

DR. PACK: These were confirmed in 2 cases by surgical excision.

DR. PALMER: Excuse me, Dr. Pack, but the argument comes not about the diagnosis of carcinoma, but the ability of those gastric glands to secrete acid in benign ulcers. I suspect that if you had done more histamine tests you would have found free acid.

DR. PACK: We used histamine routinely.

DR. PALMER: You may have an occasional histamine response, or response to a couple of histamine tests. On one occasion I did 4 consecutive histamine tests in a patient with gastric ulcer which was later excised and found to be benign. In those 4 histamine tests there was no free acid. The fifth histamine test showed a free acid of 57, and the sixth test showed a free acid of 82. Did that man have achlorhydria or hyperchlorhydria? I cite this case only to show what may be the difficulty in demonstrating the presence of free acid.

DR. PACK: It is not a fixed point that we can depend on reliably. We are speaking in generalities as we have throughout, but I believe that I am stating the consensus of the panel that the ulcerating cancers have a higher frequency of normal acid and occasional hyperacidity than is found in the other types of gastric cancer. Anacidity is more frequently associated with polypoid carcinoma in the stomach and also benign polyps.

What about the presence of hydrochloric acid in the gastric juice of patients with gastric polyposis?

DR. PALMER: In my experience, as you point out, they almost invariably have achlorhydria. I think Dr. Comfort, at the last Gastric Conference, however, had figures which were not quite in accordance with that. Do you recall?

DR. PACK: I do not believe they were discordant, not too much at least. Certainly in my own experience anacidity has been a more frequent accompaniment of gastric polyposis and polypoid cancer than it has in cancer of the stomach as a whole or the ulcerative cancer.

(*To be continued*)

ACUTE CHOLECYSTITIS

A Comparative Study of Sixty Consecutive Cases of Acute Cholecystitis Treated by Immediate Surgery and Sixty Consecutive Cases Treated by Delayed Surgical Intervention

ALEC HORWITZ, M.D., F.A.C.S.
Associate Clinical Professor of Surgery, George Washington University School of Medicine

ROBERT G. McCORKLE, JR., M.D.
Instructor in Surgery, George Washington University School of Medicine

SEYMOUR ALPERT, M.D.
Assistant Professor of Anesthesiology, George Washington University School of Medicine

THIS is a comparative study of 60 consecutive cases of acute cholecystitis corroborated by pathologic examination and operated upon from April 1, 1948 to March 31, 1952 at the George Washington University Hospital, and 60 consecutive cases of acute cholecystitis operated upon prior to 1948 by the senior author (A. H.) in which there was selective delayed surgical intervention. The first group of cases were operated upon by various members of the surgical staff, but the majority of the cases were under the care of only 3 surgeons. This report does not include cases in which, at the operating table, the gallbladder appeared grossly acute but on microscopic examination showed chronic inflammation.

Acute cholecystitis was known many years before acute appendicitis was recognized as a disease entity. Surgical opinion as to treatment of acute appendicitis is well established and unanimous, while that of acute cholecystitis is still in a somewhat confused state. Until 1923 the surgical treatment of acute cholecystitis was reserved only for complications such as empyema or perforation. The operation performed for these complications was that of cholecystostomy. Since the vast majority of cases of acute cholecystitis subsided and since the mortality following the surgical treatment was very high, most surgeons were quite willing to let the matter remain in the hands of the internist.

It was not until Walton[1] in 1923 published his low mortality figures for cholecystectomy in acute cholecystitis that there was a change in the complacent attitude of most progressive surgeons. In 1933 when the subject of the treatment of acute cholecystitis was presented for discussion at the American Surgical Association the most outstanding surgeons of that day were evenly divided as to early surgical intervention. Possibly the reluctance to operate on cases of acute cholecystitis was based on the erroneous idea that the etiology of the acute phase was due to bacterial invasion; yet cultures taken in cases of acute cholecystitis were, in the great majority, sterile. It was noted that in about 85 to 90 per cent of the cases gallstones were present and nearly always one or more were impacted in the cystic duct.

PATHOGENESIS

This led to the epoch-making experiments of Womack and Bricker[2] (1942) in which they showed that the production of acute cholecystitis depended on: (1) the obstruction of the cystic duct, (2) the local damaging effect of imprisoned bile as the result of either greater concentration or a difference in the bile constituents, and (3) the occasional secondary presence of bacterial infection which was superimposed on the chemically damaged tissue. The bacterial invasion was rarely observed before 48 to 72 hours after obstruction of the cystic duct. If the relatively small group of cases of acute cholecystitis due to acute infections such as tonsillitis, typhoid fever, acute and subacute bacterial endocarditis, etc., are excluded, the vast majority of cases of acute cholecystitis could be said to be, in their inception, caused by chemical inflammation rather than a bacterial one.

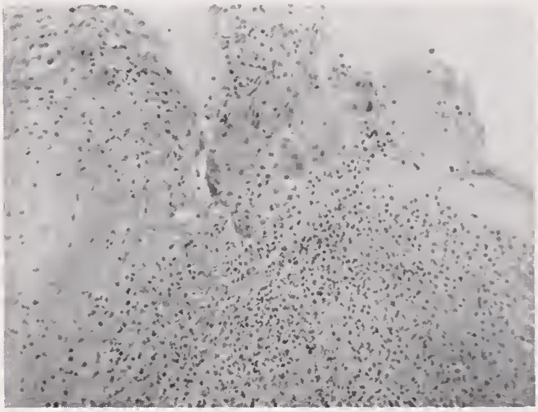

Fig. 1. Photomicrograph showing ulceration of mucosa of gallbladder.

Etiology

Statistical autopsy studies by Mentzer[3] showed that 1 out of every 4 or 5 adults have gallstones, 1 out of 3 women have them, and 9 out of 10 persons of 220 pounds or more have gallbladder disease. The importance of acute cholecystitis studies may be gauged by the fact that 30 per cent of the cases of chronic cholecystitis with stones at one time or another have an acute episode. It has been our personal observation that a number of patients developed acute cholecystitis following intensive treatment by a high-fat diet for peptic ulcer. It is important to have a cholecystogram made before any dietary treatment for peptic ulcer be undertaken to avoid plunging the patient into acute cholecystitis.

Pathologic Data

The sequence of pathologic events in acute cholecystitis as reconstructed from experimental and operating-room observations is as follows: (1) obstruction of the cystic duct by an impacted stone, (2) edema, (3) distention of the gallbladder with transudation and exudation, (4) erosion of the mucosa, (5) hemorrhage into the wall of the gallbladder, (6) after 48 to 72 hours bacterial involvement, (7) patchy necrosis beginning usually at the fundus, and (8) perforation, usually local but occasionally general.

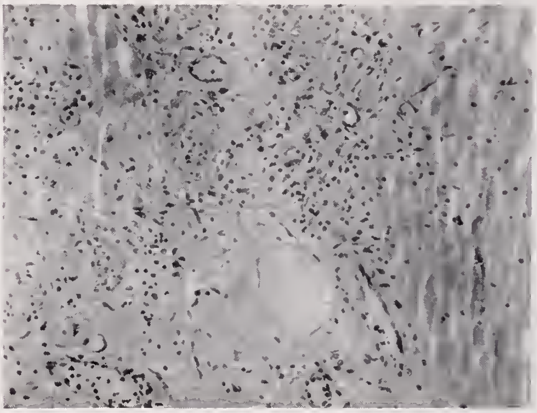

Fig. 2. Photomicrograph showing edema and hemorrhage of gallbladder wall.

The microscopic picture in acute cholecystitis is of some importance, since in many of our cases the gross appearance was definitely that of acute cholecystitis, but microscopic studies indicated chronic cholecystitis. In our present study only those cases diagnosed by the pathologist as acute cholecystitis were included. The basis for such a diagnosis is as follows: (1) ulceration of the mucosa, (2) edema of the gallbladder wall, (3) hemorrhage into the wall, and (4) fibrinous exudate on the serosal surface (figures 1, 2, 3 and 4). Our cases were divided into two subgroups: those reported as acute cholecystitis, and those reported as acute and chronic cholecystitis.

TREATMENT

The proponents of early surgical intervention for acute cholecystitis argued that if the cholecystectomy was done in the first few days before bacterial invasion occurred the mortality rate was similar to that of an elective cholecystectomy. Moreover, the operation was technically easier than after chronic changes had occurred. The opponents of early surgical intervention maintained, however, that 90 per cent of all cases of acute cholecystitis would subside. Surgical intervention, therefore, should be reserved for those cases which do not subside. The difficulty is that there are no clinical or laboratory methods to determine with certainty which cases will subside and which ones might possibly go on to serious complications. Saint[4] pointed out that the most important clinical symptom signifying possible impending gangrene and rupture was the appearance of a palpable, tender gallbladder. He used this sign as an indication for immediate surgical intervention. However, the problem is not quite so simple. Experienced clinicians realize that the clinical features will not always reflect the true pathologic state of the gallbladder.

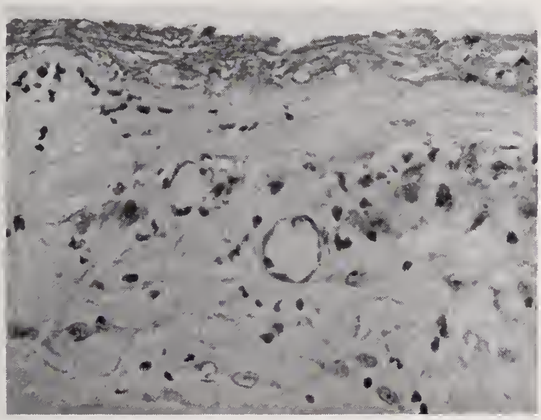

FIG. 3. Photomicrograph showing fibrinous exudate of serosal surface of gallbladder.

About 1933 surgical opinion began to crystallize. Accumulated data revealed that the mortality rate for cholecystectomy done in the first 48 to 72 hours after the onset of acute cholecystitis was approximately that of the elective cholecystectomy done for chronic cholecystitis. Many surgeons commented upon the great ease with which the operation could be performed. The mortality rate was quite high if cholecystectomy was done between the third to fourteenth day, but the mortality rate decreased if operation was done several weeks later when the acute symptoms had subsided. This led to the conclusion that if cholecystectomy could not be done in the first 48 to 72 hours after the onset of symptoms it be deferred until after the fourteenth day. There was one practical difficulty with this formula—the surgeon rarely saw the patient in the first 48 to 72 hours. This resulted either from delay in hospitalization or failure to make an early diagnosis. The high mortality in those cases operated between the third to fourteenth day was due to the unwise attempt of doing a classical cholecystectomy in a field that was anatomically distorted by marked edema and engorged, friable tissues.

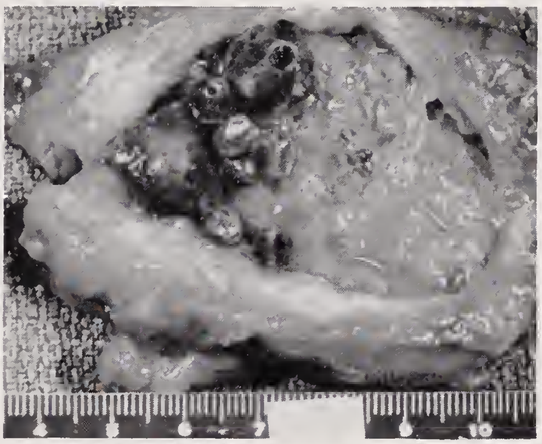

FIG. 4. Photomicrograph of an acute gallbladder with multiple calculi.

The mortality rate has decreased with the advent of antibiotics, blood banks, better understanding of electrolyte balance, and vastly improved anesthesia. Surgeons began to use better clinical judgment, and cholecystostomy was done when cholecystectomy could not be performed safely. When classical cholecystectomy appeared to be contraindicated, incising the gallbladder wall on each side, removing the stones and stripping the mucosa of the gallbladder from above downward was the operation of choice.

Surgeons remained reluctant to operate on the gallbladder in the acute stage. They sought a method to defer operation during the critical period from the third to the tenth day. It is during this period that anatomic landmarks are obliterated and exploration of the common duct is difficult, if not impossible. The hazard of damage to vital structures is greatest during this interval.

Saint[4] pointed out that danger of perforation was due to tension cholecystitis due to the obstruction. If this tension could be relieved by releasing the obstruction and allowing the bile to escape through the natural pathway, surgery could be delayed until a more propitious day.

Eastwood and Womack[5] from their studies of the nerve supply to the gallbladder found that a local anesthetic block of the right sympathetic pathway of the eighth to ninth thoracic ganglia gave immediate relief from pain. They reasoned that this caused a relaxation of the spasm of the cystic duct, which, in turn, allowed the impacted stone to fall back into the gallbladder. Thus, the acute process would relent and the patient could be tided safely over the critical period.

Our anesthesia department thought that, since fibers originating from the sixth through the tenth thoracic sympathetic ganglia may play a part, it would be more helpful to block these thoracic sympathetic ganglia. Their technic is as follows:

The paravertebral block technic utilized was suggested by Labat[6] and Lundy.[7] A skin wheal is raised 3 to 4 cm. lateral to the spinous process in the thoracic region. An 8 to 10 cm. needle is carefully inserted perpendicularly to the transverse process of the vertebra. The needle is withdrawn slightly and passed over the transverse process and medially to the body of the vertebra. The needle is then withdrawn slightly and advanced about 1 cm. so that the point of the needle is on the anterolateral aspect of the vertebral body. Five to 8 c.c. of 1 per cent procaine is then injected.

Care must be used in placing the needle. Pneumothorax may result if the point is advanced too far laterally. The subarachnoid space may be entered if the needle is placed too medially. The vena cava may be punctured if the needle is advanced too far anteriorly. Before injection of the procaine it is essential to carefully aspirate for the appearance of air, spinal fluid, and blood. If any of these appear, the needle is removed.

As is true with all local blocks, a short-acting barbiturate such as Pentothal (R) and a means of positive pressure oxygen administration must be immediately available.

Ten patients with clinically acute cholecystitis were chosen for injection to delay operation until the symptoms had subsided. All patients had relief of pain. One patient signed out of the hospital and never returned. The remaining 9 were operated upon. One patient later came back jaundiced and was found to have a carcinoma of the head of the pancreas. The remainder, whose gallbladder still appeared grossly acute, were reported microscopically as chronic disease. Seven patients were then blocked just prior to operation in order to evaluate the effect of block upon the gallbladder. At operation, of the 7 cases of clinically acute cholecystitis, 1 was a case of acute pancreatitis, 1 was microscopically acute, and the remainder were said to be cases of chronic cholecystitis by the pathologist. However, in all cases except 1, the gallbladder was still distended and did not empty on pressure. One case was equivocal. It can be said with certainty that the relief of pain from sympathetic block is not due to relief of distention of the gallbladder. It was thought that although sympathetic block gave remarkable relief of pain, it had no effect on the pathologic state of the gallbladder.

Thomas and Womack[8] have coined the term "smoldering" in speaking of a phase of acute cholecystitis and state that it is dependent upon the amount of tissue necrosis. They pointed out that the process may remain "smoldering" for weeks, and there may be evidence of acute and chronic inflammation and active fibroplasia even at that time. There have been cases in which the condition of acute gangrenous cholecystitis existed for weeks or months after complete subsidence of all clinical manifestations. In our series, 1 patient 5 months after an attack still showed the pathologic features of acute cholecystitis at the time of operation. It is possible that mild recurrent attacks may have occurred in the interim.

Study of Cases 1948–1952

The first group of cases were admitted to the hospital in various phases of their progress. Some were on the medical service for several days prior to being transferred to the surgical service. They were transferred not because they were moribund but because the consulting surgeon was one who believed in surgical intervention regardless of the time after onset of symptoms.

Some patients had been treated medically and were readmitted for surgery when the acute attack had clinically subsided. These patients were operated upon as elective cases, but the gross surgical picture and the tissue diagnosis were that of acute cholecystitis even after weeks and months had elapsed.

All patients admitted as emergencies were prepared for surgery by correction of fluid and electrolyte imbalances, institution of antibiotic therapy, and nasogastric suction. They were operated upon within a few hours after admission. The older patients with cardiovascular disease or diabetes were carefully evaluated, and medical therapy, as indicated, was instituted.

In this series there was 1 death, which occurred in the older age group. This was a male patient of 67 years who was reëxplored for a common duct stone and died following the second operation. The patient had cirrhosis of the liver, renal calculi, and coronary artery disease. He died as the result of a myocardial infarction and pulmonary edema. Our mortality rate was 1.6 per cent. We had no deaths as the result of the initial operation.

Of the 60 cases, there were 25 males or 41.6 per cent and 35 females or 58.4 per cent. The average age was 51.2 years. Twenty-seven of the patients were below the age of 50 years, and 33 patients were over this age. The only mortality occurred in the latter group. Ten patients or 16.6 per cent were admitted as elective cases.

The average duration of disease upon admission was 4.5 days, and the average time between the onset of disease and operation was 5.4 days. This was considered the most dangerous period. There were 3 instances of local perforation, an incidence of 5 per cent. These patients were 26, 52, and 81 years of age. There was no relation of morbidity or mortality to the type of abdominal incision used. The common duct was opened 9 times or in 15 per cent. Choledocholithiasis was found only once.

The average hospital stay in 54 cases was 13.2 days; 6 patients remained in the hospital for over 30 days. These 6 patients were over the age of 50 years and all had complications, either pulmonary in origin or extensive cardiovascular renal disease.

Study of 60 Cases Prior to 1948

The 60 cases of acute cholecystitis done prior to 1948 comprised 24 males and 36 females. There were 7 patients, 4 males and 3 females, operated upon in the early period of 1 to 3 days. There was no mortality. A cholecystostomy was done in only 1 case and cholecystectomy in the others.

Eleven patients, 5 males and 6 females, were operated upon between the seventh and fourteenth day. There were 4 deaths. Many of these patients were admitted to the hospital in a precarious condition. All but 1 were over the age of 50 years. Four cholecystectomies were done; the rest were cholecystostomies. One patient after cholecystectomy died of hepatic failure in the fourth week postoperatively; 1 patient after cholecystostomy had massive pulmonary embolism on the fourteenth day postoperatively, and 2 such patients were moribund on admission. It will be noted that the deaths occurred in the very aged, 65 to 78 years.

Forty-two patients were operated upon after the fourth week of onset of their disease. One patient presented an empyema of the gallbladder, and a cholecystostomy was done. A cholecystostomy was done on a patient 75 years of age, and the remaining patients had cholecystectomy. There were no deaths in this group.

Tables 1, 2 and 3 give pertinent data of the 2 series.

TABLE 1

AGE	PRIOR TO 1948	1948–1952
20–29	4	2
30–39	8	11
40–49	21	14
50–59	10	16
60–69	11	10
70–79	6	5
80–89		2
Total	60	60
Average	49	51.2

TABLE 2

	PRIOR TO 1948		1948–1952	
	No.	Percentage	No.	Percentage
Cholecystostomies	10	16.7	7	11.6
Cholecystectomies	50	83.3	53	88.4
Cholelithiasis	59	98.3	54	90
MORTALITY	4	6.6	1	1.6
Males	24	40	25	41.7
Females	36	60	35	58.3

Summary and Conclusions

In reviewing the 120 cases it becomes evident that there is no routine that can be applied to the treatment of acute cholecystitis because of many variables. Age, the concomitant pathologic conditions, and the operative findings all play a part in the decision as to the operative procedure that is to be followed. Surgical experience will dictate when to do a classical cholecystectomy, a partial cholecystectomy, or a cholecystostomy. Other factors such as the teamwork, the anesthesia, and the hospital facilities may influence the final decision. In general, it seems that surgery instituted as soon as the patient is properly prepared is the preferred course.

Acute cholecystitis is a surgical emergency. Patients with acute cholecystitis should be operated upon within a few hours after the diagnosis is made and dehydration and electrolytic imbalance is corrected. The operation of choice is the operation which best suits the patient's needs. Cholecystectomy is preferred, but cholecystostomy may be the wiser procedure and should be done when indicated. Sympathetic ganglion block has not given the results in our hands as reported by others but is a useful adjunct in the preoperative period. Since 90 per cent of all patients with acute cholecystitis have calculi, the best prophylaxis for acute cholecystitis is cholecystectomy for chronic cholecystitis and cholelithiasis.

TABLE 3

Mortality Prior to 1948 According to Time of Intervention

TIME	CASES	SEX		CHOLECYSTOSTOMY	MORTALITY	CHOLECYSTECTOMY	MORTALITY
		M	F				
1–3 days	7	4	3	1	0	6	0
7–14 days	11	5	6	9	3	2	1
After 4th week	42	14	28	2	0	40	0

MORTALITY	AGE	CAUSE
1	73	Died 14th day—Massive pulmonary embolism
1	77	Moribund on admission
1	78	Moribund on admission
1	65	Autopsy failed to show cause, probably hepatic failure (4 weeks after)

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TUBERCULOSIS SURVEY AND THE GENERAL PRACTITIONER

I. PHILLIPS FROHMAN, M.D.
Washington

PREVENTIVE medicine is the medicine of the future."—Osler. Preventive medicine is the medicine of today!

A discussion of the physical findings, the diagnostic criteria, or the treatment of tuberculosis is not intended in this writing. Rather, it is the general practitioner in his role of guardian of the public health who will be spotlighted, with particular attention to his responsibility for the early detection of tuberculosis.

General practitioners see 85 per cent of this country's medical patients. The implication of this statistic can neither be dispelled by argument nor, with conscience, ignored. It means simply that the success of preventive medicine and the constant vigilance of the general practitioner are inescapably correlated. And this vigilance must not be sporadic; it must embrace all patients. A careful and complete history, physical examination, and X-ray examination of the chest should be as much routine as is the medical history.

Patients will not be as difficult to persuade to this idea as you may at first think. Patients are smarter than they used to be not so very many years ago. They know more about their physical structure and the ills to which the flesh is heir. They can talk glibly of vitamins, antibiotics, and how essential it is to "catch cancer early." They are interested and alert to the technics, new and old, and they expect their physicians to keep them well, not just make them well.

For this we owe a debt of gratitude to the country's advertising media which have so successfully disseminated the health propaganda of the many "special disease" research groups, e.g., the American Cancer Society, the American Heart Association, the National Foundation for Infantile Paralysis, etc. Private enterprise has also contributed to this public service through paid advertisements. An outstanding example is the attention given by insurance companies to diabetes and heart disease.

In April and May of 1952, under the sponsorship of the Kiwanis Club, the District of Columbia Tuberculosis Association operated mobile X-ray units throughout southeast Washington. In a period of 6 weeks, 10,830 chest pictures were taken on microfilm. These represented both males and females whose ages ranged from 15 to 45 years and who came voluntarily to the units. Upon examination of the films the Association requested 511 to return to the clinic for repeat X-ray examinations on larger film; and of this number, 165 persons were studied more completely via sputum examination, sedimentation rate, etc. Twenty-seven cases of tuberculosis "in some form or another" were detected and, of these, exactly 10 cases of active tuberculosis were uncovered, with only 3 cases of far-advanced tuberculosis necessitating hospitalization.

Let us consider the vast scope of the survey, the number of X-ray films made, and the amount of time (6 to 8 hours daily except Sunday) required to reveal 13 cases of active tuberculosis, 3 requiring hospitalization. This is approximately one tenth of 1 per cent, a small figure for so large an investment.

In the first 6 months of 1952, as a general practitioner in private practice, I took X-ray films of the chest of 89 patients in the 3- to 76-year-age group in my office and discovered 4 cases of active, advanced tuberculosis in patients aged 19 to 55 years, which necessitated immediate hospitalization, and 2 cases of silicosis. All of these were taken on 14 by 17 film. The percentage of diagnoses was approximately 4.4.

It is highly unlikely that either of the groups X-rayed is a sample representative of the total population of this area. The group examined in the mobile units contained only the middle-age range and represented only those persons who had been reached by the Association's publicity, who wished to come, and who were able to come. No device for random selection was employed. Likewise, my group of patients could scarcely be considered an unbiased sample either, if for no other reason than that they were all sick people. Nevertheless, the disparity between the percentages of active tuberculosis in the 2 groups is sufficient to cause one to pause for reflection. If 3 far-advanced cases are found in a public survey of 10,830 people and 4 such cases are found in 89 of a general practitioner's patients, which is the better place to look for possible tuberculosis?

One of the best survey areas still untapped by the physicians and/or general surveys is in the hospitals themselves. It should be routine and required practice to have a chest X-ray film taken of every patient admitted to any hospital. Herein lies the most important survey of all. The potential detection of minimal tuberculosis is most important from the standpoint of complete cure and recovery, more so than far-advanced tuberculosis.

Statistics will bear out the fact that, if all patients admitted to the various hospitals had routine X-ray films of the chest, more tuberculosis and other pulmonary and cardiac diseases would be exposed, possibly with the same percentage rate as seen in my practice.

The general practitioner cannot afford to fail to seize his opportunity to detect these cases. He has a public responsibility to do so, particularly in light of the above figures, which indicate that if he does not, no volunteer survey will or can detect them. There are certain persons, sick and well, who will not be seen in any general survey, whether it be for pulmonary diseases, cancer, heart trouble, or diabetes. These are usually the youngsters under 15 years and the older folk of 55 years and up. Such individuals generally are seen only when they become ill and seek their physicians for treatment or advice. Their complaints may be minor, but, nonetheless, this is the time to survey these patients for other diseases, and general practitioners are the doctors to do such a survey. They should look for signs and symptoms other than those relating to the patient's main complaint (which often is trivial) and be alert for diseases of the lungs and other organs. Their examination should include, in addition to the physical examination, an X-ray film of the chest, a blood pressure estimation, a blood count, and a urinalysis. Only thus can the physician fulfill his obligation to the patient.

Most patients can be convinced of the value of a routine X-ray examination of the chest. Usually an indirect and casual approach is all that is necessary. Even when the consultation concerns only a simple complaint or one in no way related to the respiratory or circulatory systems, it is a rare patient who objects, for example, to a suggestion that he have his blood pressure checked, or who fails to give an amicable reply to the question, "Do you smoke?" From there one may gently lead up to the important. "When did you last have your chest X-rayed?" Such artful direction of the consultation can nearly always result in not only the X-ray examination, but also a urinalysis and cardiac examination.

However, this ease of persuasion cannot be attributed entirely to the physician's skill; again, we must thank our advertising media for creating a health-conscious public. Such tractability in patients indicates that at least part of their "sales resistance" to preventive medicine has already been dissipated. The job is consequently much simplified. Yet it seems but a short time ago that the obstinate patient was the customary one. His refusal of each procedure suggested was almost automatic. He had to be almost herded into the X-ray room; obtaining a blood specimen was like cattle-branding; and electrocardiograms or basal metabolism rates were absolutely out. The poor physician escaped frustration only when the patient was too sick to object, and then

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President's Page

"HAVE A HEART"

This message is apropos of one written recently on the subject of lack of coördination of medical resources in the District of Columbia. But it goes further than that. I want to show that there is lacking a sense of responsibility to the needs of indigent patients. Two examples will show what I mean.

One patient came into my office in the end stage of cancer. He was an aged Government clerk with a wife to support. He had used up all of his sick leave, and except for $300 was out of funds. He needed immediate hospitalization. I called Gallinger Hospital and was told to send his wife to the Bureau of Medical Assistance at the Health Department. Some time later I was called from there and asked if tomorrow would be all right—that they didn't have time today to investigate the case. Later that day another person called from the Bureau and asked if this was an emergency case. When informed that someone had already called, the answer was that they didn't know about that. The next day the wife was told that her husband was not economically eligible to be admitted to Gallinger and that other arrangements would have to be made. That night at 1:30 the patient was taken to Gallinger as an emergency patient and the wife told that her husband would have only a few days to live. He would be sent home, they said, in spite of the fact that the wife had little funds and was suffering with hypertensive heart disease.

Another case was that of a 47-year-old taxi driver with a wife and 10 children. He lived in nearby Maryland. He developed rheumatoid arthritis. Treatment by a private physician didn't help. He was sent to the Fairfax Welfare Board which entered him in Georgetown Hospital. After treatment there he was told to go to the Hospital Service Agency for a pass, and although not working was told he would have to pay for future treatments at the Georgetown Clinic. He didn't go but started back to work. After some time he went to the George Washington Hospital Arthritis Clinic. He was told that they treated only District residents free. They examined him but later told him he would have to go to Prince Georges County for treatment. At the Prince Georges General Hospital he was told they had no arthritis clinic and that they would send him elsewhere for treatment. Forty-one days went by without word—and then he wrote me.

The first case illustrates the confusion, inflexibility and unrealistic attitude of our District agencies. Probably the primary fault is the regulations under which the agencies work. The second case demonstrates, in spite of the patient's dilatoriness, lack of planning for the care of the indigent sick of this entire Metropolitan Area and the absence of sympathetic understanding of the confused sick man's dilemma. Can't we have a heart?

Wallace M. Yater

Editorials

FALLACIES IN RESUSCITATION

Clinicopathologic studies consistently show that deficiencies are still commonplace in resuscitation for sudden collapse. In these situations, where there may be only time enough for a few well-defined acts, every move must count for something. Therefore, it is often necessary for erroneous behavior to be eradicated before the establishment of correct procedure. This is the rationale of laying stress on things NOT to do in resuscitation.

Resuscitation is needed when there is collapse in respiration or circulation or in both. Although it is true that depressions in either often correct themselves, it is wrong to believe that curves of function show regular progress downward as compensation begins to fail. A truer comparison is with a falling body which drops faster and faster as catastrophic landing is approached. Thus it is a basic error to "wait and see" when early depressions are observed in these vital functions. The result of such policy may be some cases listed as cardiac arrest instead of a few in whom unnecessary support is given.

Many have observed that modern physicians would find it difficult to practice without frequent recourse to syringe and needle. The tendency to depend upon injected drugs to control depressions is still far too great despite the fact that analeptics have been thoroughly discredited in resuscitation. It is especially bad if these manipulations are allowed to interfere with the more basic artificial respiration, without which no patient in real collapse can be successfully supported.

Even when the transcendent need for artificial maintenance of pulmonary ventilation is recognized, however, there are serious pitfalls for the unwary. It is shameful that it has taken so long for the establishment of any real understanding of the inefficiency of manual methods of artificial respiration. When physicians in operating rooms have disconnected gas machines by which a pure oxygen tidal exchange exceeding 800 c.c. could easily be obtained and have substituted an air exchange, often less than 150 c.c., by manual chest pressure, the error should have been notable. It is still too little known that since manual methods are largely dependent on recoil of the chest wall, their efficiency decreases as collapse deepens and as the need for resuscitation increases.

In connection with the argument about method, it is less obvious but perhaps even more important to stress that it is entirely wrong to stop to insert an endotracheal tube before giving artificial respiration to a patient in collapse. The patient should be well oxygenated before there is any serious consideration of intubation in most instances.

It is wrong to give carbon dioxide for resuscitation. The patient already has too much because metabolism adds to it while apnea prevents its normal elimination. The knowledge that it is much more depressing than ethylene or nitrous oxide should prevent any consideration of using it to resuscitate.

A widespread error in basic thinking on this subject is to consider that the newborn baby differs qualitatively from the more mature individual. The things to avoid are the same; the true principles to follow are the same.

When we read so often the glib statement

Opinions expressed in contributions to the Editorial Section are those of the writers and do not necessarily reflect the views of The Medical Society of the District of Columbia.

that in spite of the usual methods of resuscitation the patient died, it is difficult to believe that the writer really knew correct procedure. Even when we read that as soon as collapse was recognized stimulants were injected and an endotracheal tube was immediately inserted for artificial respiration, we wonder how much these things damaged the patient.

Our resolution should be to recognize early deviations from normal and never be too proud to begin at once correcting them. If we then must deal with collapse we will not use analeptics or carbon dioxide, or unnecessary intubation. This will clear the decks for unhampered action in obedience to the true principles of resuscitation, which are immediate ventilation of the lungs, with pure oxygen if possible, and appropriate direct support of circulation as needed.

D. S.

THE PHYSICIAN AND THE RED CROSS BLOOD PROGRAM

Blood has become an indispensable agent for the treatment of all manner of illnesses. Washington has been particularly fortunate in that one of the earliest blood banks in the Nation was opened here at Gallinger Municipal Hospital. Subsequently most of the hospitals in the area developed their own blood banks. That is not to say that the hospitals, operating individually, have always been able to meet the needs placed upon them. A seriously bleeding patient of an unusual blood type frequently taxed the resources of these banks, and in some instances sufficient blood was not available to meet the needs.

Shortly after the end of World War II the Washington Regional Blood Center of the American National Red Cross was opened. This Center has supplied the requirements of most of the hospitals in the Washington area for a number of years. Because of larger resources for donor procurement it is usually possible for the Center to meet the needs of any of the hospitals which it serves, even when large quantities of blood of unusual type have been requested. Patients hospitalized in this area, and the doctors serving them, thus have the assurance of adequate blood supply available at all times. There is no question that lives have been saved thereby.

From its beginning this Center has operated with the blessing of the Medical Society of the District of Columbia. A special committee of the Medical Society serves in an advisory capacity to the Center and has done so for a number of years.

Supported by voluntary donations, during the past fiscal year more than 100,000 pints of blood were collected by this agency. In addition to the fixed Center where donors are bled regularly, three "bloodmobiles" operate from the Center to collect blood from various agencies in the District of Columbia and throughout the 31 counties of Virginia, Maryland, and West Virginia, which comprise the region of which Washington is the center. The local chapter of the Red Cross in each of these counties coöperates to secure donors and to supply volunteer helpers in each operation.

Of the total quantity of blood collected during the last fiscal year of operation about 55 per cent was distributed as whole blood to the hospitals in the area. The remainder has been assigned chiefly to the Department of Defense; a smaller quantity has been processed into plasma for local use and for storage.

During January of this year the Blood Center moved from its old address to a new one at 2025 E Street, Northwest. The Center is now located in the new District Chapter building of the Red Cross, where special provisions have been made for its operation. In the new building, which is fully air-conditioned, donors can be handled more satisfactorily, and the provisions for processing and distributing blood are much more adequate than was previously the case.

For the current fiscal year the staff has set a production quota of 437 units of blood per working day. This figure includes the production of the fixed Center and all bloodmobiles. There is reason to believe that this quota will be increased in the near future. Red Cross has agreed to collect blood for the preparation of gamma globulin, to be used for immunization against poliomyelitis, viral hepatitis, measles, etc. The quantity of blood needed for this purpose may well exceed that required for all present uses.

Volunteer donor recruitment has been organized effectively by Red Cross officials and a special committee composed of volunteers appointed for that purpose. At present 409 donor groups participate regularly in the program within the District of Columbia and surrounding areas. Approximately 70 per cent of these are organized within the various agencies of the Government, while 30 per cent are non-Government. Although the chief incentive for participation in these donor groups is patriotism and interest in national and civil defense, more recently self-interest has become an important motive. If a donor group contributes regularly and if a sufficient proportion of the members of the group participate, then all members of that group and their immediate families are eligible to receive blood as needed.

As blood has become more readily available and as volunteer donor recruitment has improved, there has developed an alarming tendency toward deëmphasis of blood replacement. Apparently because the blood needed can be requisitioned from Red Cross without prior registration of equivalent donors, the drive for donor procurement among the relatives of recipients has lost much of its impetus. This should not be the case. The volunteer donors should be thought of as providing the reserves of blood for the immediate need of the patient. Donations from the friends of recipients are required to bring the stocks back to the level provided by the volunteer donors.

The need for blood has mounted rapidly as new uses for blood and blood derivatives have been discovered. Since the program has been endorsed by the American Medical Association and by the Medical Society of the District of Columbia, it should receive the personal support of all physicians in the area. In particular, those physicians who use blood in our hospitals should urge upon the relatives and friends of recipients the importance of blood replacement. It is imperative that the physicians and the recipients of blood realize their moral obligations in this matter.

T. M. P.

WASHINGTON SCIENCE FAIR

The Science Fair of 1953 will be the seventh annual event. The object of the Science Fair is to "stimulate and encourage an interest in science study by all the students in our schools." Pupils from 7 years of age to completion of high school are eligible. This Fair is sponsored by The Washington Academy of Sciences, with which the District of Columbia Medical Society is affiliated.

It is commendable that the Medical Society has contributed to the financial support of the Science Fair. The students who prepare the exhibits, largely as an extracurricular activity, are the future doctors and scientists of our community. Any encouragement that can be given to stimulate original contributions is a step in the right direction.

Science Service and the newspapers of Washington are most coöperative in their sponsorship, and it is timely that the Medical Society, its members and friends take an interest in this worthy cause. For your information I hope you will read the article on Science Fairs which appears in this issue of the Medical Annals.

Fred O. Coe, M.D.

THE DAVIDSON LECTURE

Competition is now open for the Twelfth Davidson Lecture. This lectureship was established in 1929 to commemorate the service which Dr. Edward Young Davidson rendered to the Medical Society of the District of Columbia by making possible the erection of the present "home" of the Society. Selection of the Lecturer was placed on a competitive basis in 1936 in order to stimulate research and performance of a high order. The Lecturer is rewarded with an honorarium and a certificate of award.

The 1951 Davidson Lecturer was Dr. Jonathan M. Williams, whose paper on "The Amygdaloid Nucleus; a Clinical Study of Its Bilateral Ablation and a Theory as to Its Function" was considered the best of those submitted. Dr. Williams presented his paper before the Medical Society at the first Midwinter Seminar, February 20, 1952.

Competition is not confined to physicians, since the rules for the Davidson Lecture specifically state that manuscripts from scientists working in allied fields in the District of Columbia are acceptable.

The rules governing the choice of the Lecturer are as follows:

> "The selection of the Davidson Lecturer shall be on the basis of competition, the winning essay to be selected by a subcommittee consisting of five (5) members of the Executive Board appointed by the Chairman. No member who desires to compete can serve on the committee.
>
> "The competition shall be thrown open to physicians or other scientists working in the District of Columbia.
>
> "The essays to be submitted must bear no indication of the author's identity, being signed by a *nom de plume.* The identification of the author must be in a sealed envelope bearing on its surface the same *nom de plume.* No essay may be submitted that has been published.
>
> "Essays should be submitted to the Secretary of the Medical Society of the District of Columbia not later than July 1 of odd numbered years.
>
> "In case no essay is found worthy of an award, the subcommittee shall declare no award; the lecturer then to be selected by the full Executive Board."

All essays must be in the hands of the Secretary of the Medical Society not later than July 1, 1953. No manuscripts will be accepted after that date.

In and Out of Focus

BY THE OBSERVER

Bureau Expansion Planned

Members of the Society have often been heard to say that no project undertaken by the Medical Society has created more public good will than its telephone exchange, Medical Bureau. It is perhaps the Society's outstanding achievement in public relations.

Established on December 1, 1940 with modest assistance from the Society ($1,000, since repaid), 100 physician-subscribers, and 4 operators, it has enjoyed gratifying success.

From the beginning, the Bureau offered so-called Alternate Listing Service, where the physician had listed below his telephone number, "If no answer, call Medical Bureau, Republic 6100," and Secretarial Service, where the physician's telephone is connected by a special wire to the Bureau's switchboard. When a key is thrown in the physician's office or residence the call is intercepted by Bureau operators.

The number of physician-subscribers grew rapidly after the first year. On December 1, 1952 the total stood at 745 subscribers, 404 Alternate Listing Service and 341 Secretarial Service. The

Bureau now employs 19 full and part-time operators and a business manager. The first business manager was Mr. J. Richard Connelly, who was succeeded in 1949 by Mr. Lawrence A. Zupan, presently engaged in that capacity.

This rapid growth has naturally brought with it some difficult problems. Most difficult to solve has been the maintenance of efficient service during peak periods when the volume of the calls is unusually large. The need for immediate action in this matter was emphasized recently during the high incidence of respiratory illness when the switchboard was often flooded with calls. Operators found it impossible to respond as subscribers and patients had a right to expect and naturally there were complaints, not a few of them justified.

At a meeting of the Medical Bureau Committee on February 5, 1953, plans which had long been under consideration for expansion of the Bureau were approved. Because they involved the remodeling and enlargement of the present quarters and considerable expenditure of funds, they were submitted to the House Committee, which gave its approval. The plans will be considered by the Executive Board at an early meeting.

Plans for expansion call for the separation of Secretarial and Alternate Listing facilities. A five-position secretarial switchboard will be installed to serve Secretarial Service subscribers and a two-position switchboard for Alternate Listing Service subscribers and miscellaneous calls. Installation of additional equipment will require more personnel. At the present time, during busy periods there are 5 operators "on the board." This number will of necessity be increased to 7 and sometimes 8, depending upon the number of new subscribers to the Secretarial Service.

To provide these additional facilities and personnel, it will be necessary to increase subscription rates for Medical Bureau service. The Medical Bureau Committee feels certain that subscriber-physicians will be more than pleased to pay a small additional amount for a much improved service. The Bureau's rates will still be well below those of commercial answering services.

Plans for expansion are already well under way. Switchboards were ordered some months ago and will be delivered in the fall. Architects have drawn preliminary plans for new Bureau quarters and construction should be under way in mid-summer.

Another and better chapter in the Bureau's history is about to be written.

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Pension Plans and Doctors

Millions of employees in this country are covered by approved pension plans. Under the provisions of Section 165 (a) of the 1942 Revenue Act, they are not required to pay income taxes during their working years on the employers' contributions to their retirement funds. When employees retire they must, of course, pay income taxes on that portion of the retirement funds paid by employers. Incidentally, employers may deduct as a proper cost of doing business their contributions to employee pension plans.

Like other self-employed persons, physicians are not entitled to a similar tax arrangement. They are required to pay taxes currently on such funds as they may invest in annuities or retirement policies. An effort was made in the last Congress to remedy this discrimination by legislation, but the proposals were introduced too late for adequate consideration. Bills recently introduced are said to have a much better chance of passage, although they may be held over until the income and corporate tax reductions have been disposed of.

For the information of his readers your Observer quotes the following from a statement received recently from C. Joseph Stetler, Secretary of the Committee on Legislation of the American Medical Association:

> "During the first week of the 83d Congress bills were again introduced to permit tax deferments on amounts

used to purchase retirement annuities. These measures, H.R. 10 and H.R. 11, which were introduced by Mr. Jenkins of Ohio and Mr. Keogh of New York, are identical with the 'Keogh-Reed' bills of the 82d Congress. The bills are designed to encourage the establishment of voluntary pension plans by individuals and to provide more equitable tax treatment for self-employed persons. The bills in their present form now include all the amendments suggested by the American Medical Association at hearings on the original legislation last May.

"Through amendment of the Federal Internal Revenue Code, the bills would allow physicians and other self-employed individuals to deduct from their taxable income those amounts used each year to finance restricted retirement plans. Employed persons not covered by existing pension plans also would qualify for the tax deduction privilege.

"Income received later during the years of retirement, either from pension funds or insurance annuities, would then be taxable under the prevailing rates. In other words, they provide tax deferment but not tax avoidance."

The statement concludes that "this legislation, which has the approval of the American Medical Association and twenty other national organizations [including the American Bar Association], can be enacted by the 83rd Congress if physicians and all other self-employed persons work actively together for its passage."

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Opinions vs. Facts about Hospital Costs

There are few persons, even among doctors, who will not venture curbstone opinions about hospital costs. While they may vary considerably in their views, there is general agreement on one point—hospital costs are too high. When serious illness strikes, they can be and often are catastrophic for persons of moderate income. Blue Cross Plans have lightened the burden considerably for those fortunate enough to have such protection, but threats to their stability are seen in the ever-mounting hospital operating costs.

From this point on, numerous questions are raised, among which are the following: Are hospitals generally well managed? Why is it that so-called voluntary hospitals are usually operating at a loss when private hospitals show a profit? Aren't the high, and sometimes fluctuating, charges for medication and other incidentals an indication of poor management? Why don't hospitals adopt a uniform accounting system in an effort to determine just how efficient the management of their institutions is? Are our hospitals too luxuriously appointed? Why are facilities not planned primarily with utility in mind? Why do voluntary hospitals continue to care for indigent patients at less than cost? Have hospitals lacked conviction in their appeal to their local governments, who are in the final analysis responsible for the care of these patients? Should the educational features of hospitals be chargeable to the care of patients? To what extent are physicians responsible for increased hospital costs? Do they hospitalize patients unnecessarily and prescribe more drugs than are essential?

Answers to the above and many other questions are being sought by the American Hospital Association's Commission on Financing of Hospital Care, headed by Gordon Gray, President of the University of North Carolina. The 34 Commission members include such well known physicians as Raymond B. Allen, Chancellor, University of California; Arthur C. Bachmeyer, Past President, Association of American Medical Colleges; George Baehr, President and Medical Director, Health Insurance Plan of Greater New York; Stanhope Bayne-Jones, President, Joint Administration Board, New York Hospital-Cornell Medical Center; Robin C. Buerki, Executive Director, Henry Ford Hospital, Detroit; Morris Fishbein, Editor, *World Medical Association Bulletin*, Chicago; Paul R. Hawley-Director, American College of Surgeons, Chicago; Vane M. Hoge, Assistant Surgeon General, Public Health Service, Washington; Leonard W. Larson, Director, Quain and Ramstad Cancer Clinic, Bismarck; Walter B. Martin, Chief Medical Consultant, DePaul Hospital, Norfolk; Howard A. Rusk, Associate Editor, *The New York Times*; Ernest L. Stebbins, Director, School of Hygiene and Public Health, Johns Hopkins University, Baltimore; Charles F. Wilinsky, Director, Beth Israel Hospital, Boston.

The Commission, which is an independent non-governmental agency, was sponsored by the American Hospital Association for the purpose of studying "the costs of providing adequate hospital services and to determine the best systems of payment for such services." Its first progress report, which made its appearance late in January, is encouraging. Apparently, the Commission is resolved that this will not be just another study. Hundreds of health and welfare organizations throughout the country, the Commission states, are giving their cooperation.

"In the five years between 1946 and 1951," according to the report, "the cost to hospitals for each day of patient care rose from a national average of $9.39 to $16.77—an increase of 79 per cent. How much of the increased cost of hospitalization is due to expanded services; how much to higher costs of labor and materials? That is a question for the Commission to answer. By what means may costs be held to a minimum, through more efficient management, without impairing services?"

On sources of income the report makes these significant observations:

> "Hospitals originally were charitable institutions, and even today relatively few patients pay the full cost of the hospital care they receive. In the voluntary hospitals of the Nation, which will serve two thirds of the more than 19 million patients admitted this year, total income is derived from endowment, from charitable donations for general or special use, and from payments of public and private welfare agencies, as well as from patients.
>
> "Many hospitals have been operating at a financial loss, or without adequate depreciation allowances for essential replacements. Income from endowment remains relatively fixed, and sources of additional endowments are shrinking; welfare agencies thus far have been unable to increase their payments enough to meet rising costs; philanthropic donations have not kept pace with expanded services and the need for capital funds for plant expansion and improvement.
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> "Hospitals have been forced to transfer a larger and larger proportion of their costs to the patient, and the cost of hospitalization can be a catastrophic burden to the budget of all but a very few.
>
> "Prepaid care is the only substantial new contribution to hospital income. Over half of the population now has some form of protection against the costs of hospitalization. What proportion of the national hospital bill is now paid by such means? Is extension of such coverage a solution to the financial problem? How is the use of hospital service related to prepayment? These are elements for national study."

The Commission considers the most urgent problems in hospital finances as being "(1) determination of the elements of hospital costs and means by which costs may be held to a minimum; (2) the role of physician-hospital relationships as a factor in hospital costs; (3) financing of hospital care for non-wage and low income groups; and (4) the use of voluntary prepayment as a means of meeting the costs of hospital care."

Three "working committees" have been active for some time, the Committee on Fiscal Studies, the Committee on Financing Hospital Care for Non-Wage and Low Income Groups, and the Committee on Prepayment. These committees have established their objectives, surveyed the information available in their area, and determined what additional data are needed and how they are to be obtained.

Among the reports which are promised are "Financing Hospital Care for Non-Wage and Low Income Groups," "Prepayment and the Community," "Hospitals and the Community," and "Financing Hospital Care for the American People." The last report will sum up the Commission's findings and contain its recommendations.

The progress report closes with an appeal for public interest. Citizens of the United States, it is observed, will be the "jury" which will render the final verdict on the Commission's investigation.

'Zest for Living' The years pass far too rapidly for all of us. Most of us accept this fact as something we can do nothing about and let it go at that. The less philosophical may make frantic, and sometimes ludicrous, efforts to stay the passage of time. Their concern with physical appearance is often pathetic, for they delude no one but themselves.

As every sensible person knows, the youthful spirit is vastly more to be desired. Fortunate indeed is the person who possesses it. His dominating characteristics are the forward look, insatiable curiosity, and a serious effort to be useful.

If this yardstick is used, Dr. John B. Nichols, Past President of the Medical Society of the District of Columbia (1912) and Advisory Medical Director of the Acacia Life Insurance Company, Washington, rates very high in your Observer's estimation. Dr. Nichols is no longer as active in medical affairs as he once was. This is unfortunate for younger members of the Society because it is their loss. They should know this keen, intelligent and thoughtful man, who still has much to offer. He would be an inspiration to them.

Before he came to Washington in 1938 your Observer had heard a great deal about Dr. Nichols. He had been told that Dr. Nichols was not only an unusually able physician but that he had many interests aside from those of a professional nature. This was confirmed the spring following his arrival, when on a warm, sunny Sunday Dr. Nichols and your Observer and their families journeyed by automobile to nearby Virginia. It had been agreed that Dr. Nichols would take the group to the various Civil War battlefields, with which he was intimately familiar. It was a highly interesting, enjoyable and instructive excursion.

Later, your Observer was to enjoy the unusually enlightening experience of working with Dr. Nichols on the Society's present Constitution and By-laws. Subsequently, Dr. Nichols wrote Volume Two of the "History of the Medical Society of the District of Columbia." While this was a labor of love, it also made heavy demands upon Dr. Nichols' time. At the present time, Dr. Nichols is active in the Columbia Historical Society, to which he has made important literary and historical contributions.

Despite his interest in history, Dr. Nichols is very much alive to current problems. His primary interest in the past is to bring it alive for the present generation because of its significance for our times. Often the fact that it holds an absorbing story fascinates him.

Dr. Nichols was awarded the Medical Society's Certificate for Meritorious Service in 1943. Accompanying it was a tribute which in grateful terms credited him with having welded two antecedent societies (The Medical Society of the District of Columbia and The Medical Association of the District of Columbia) into one organization of which he became the first president. Excerpts from the tribute follow:

"The present recipient of this honor has served this Society in nearly every capacity for almost fifty years.

"His name is found as chairman or member of many important committees in the old, antecedent organizations, the Medical Association and Medical Society of the District of Columbia.

"He was thus powerfully instrumental in giving us our present integrated Medical Society of the District of Columbia.

"He led us in the early application of biological sciences in the clinical laboratory, to aid in the diagnosis of disease, and so enhanced the science and art of clinical practice."

The Acacia Life Insurance Company honored Dr. Nichols on the completion of 50 years of service with the Company in August 1952. The Company's publication *Acacia Clarion* said about Dr. Nichols at that time that he was "a man of inexhaustible energy, he has packed a great deal into his life. At 35, when he first joined Acacia, Dr. Nichols could look back on 11 years as a doctor, first as a practitioner, later as an instructor at his alma mater, Columbian

College (now George Washington University). He had worked under Dr. Walter Reed, who was later to conquer yellow fever. Among his students was the late Dr. C. M. Beall, who for many years, until his death late last year, was Acacia's Assistant Medical Director.

"Throughout the years he has given much to the science of medicine, through research, inventiveness, and a willingness to try new approaches. He was a pioneer in the use of blood pressure in diagnosing and treating disease. To further this, he devised one of the first blood pressure measuring machines. Later, he was to become one of the first doctors to use diet in the treatment of typhoid fever, and his essay on this subject, 'Diet in Typhoid Fever,' won the Fisk Fund Prize in 1907."

This remarkable man continues to inspire his associates with his zest for living. They and his many friends wish him many useful and fruitful years.

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"X-Rays . . . and You" A day or two after the January issue of the MEDICAL ANNALS was mailed, your Observer received a telephone call from a Washington radiologist who had just read the comments in this column on "The Story of Anesthesiology" in which high praise had been given its public relations value. He said he was forwarding a copy of "X-Rays . . . and You" because it also had received much favorable comment.

Your Observer hastens to state that this pamphlet deserves the kudos bestowed upon the anesthesiology "story." "Elegant" is an appropriate description of this handsome booklet. A richly colored photograph of a mother and child decorates its enameled cover. The text is lavishly illustrated with black-and-white photographs of adults and children engaged in healthful activities, and with reproductions of numerous X-ray films.

This is the type of educational material that the layman takes pleasure in looking at as well as reading. It is not sponsored by a medical organization, as in the case of the anesthesiology "story," but by the Medical Division of the Eastman Kodak Company.

The following excerpts will indicate the care and skill with which the subject matter is presented:

> "Physicians used the X-rays from the time they were first discovered to study bones and chests and hearts because these parts of the body showed up quite clearly. But, for a long time, everything else inside the body only showed up on a radiograph as vague, indistinct shadows. One organ would get in the way of another, or two organs side by side would look like one organ on the film. Naturally, this was very frustrating. The information was there, but no one could read it—until a famous doctor thought of a solution to the problem.
>
> "If all those organs didn't show up because they were the same density to X-rays, why not fill the organ to be studied with something more dense—something opaque to X-rays—that would make it stand out from everything else around it. This seemed both reasonable and simple, but it soon proved to be more reasonable than simple. There was the double problem, you see, of finding radiopaque substances—radiopaque meaning opaque to X-rays—that would outline just the part of the body to be studied and no other part, and that wouldn't harm the patient.
>
> "It has taken close to fifty years to solve this apparently simple problem for most hollow parts of the body, but it's been done, from the brain and the spaces around the spinal cord to the innermost recesses of the heart. Sometimes, if a radiopaque substance won't work or isn't suitable, radiologists reverse the process and use air, in order to make the organ more transparent to X-rays than the surrounding area."

There follow descriptions of the use of X-ray in broken bones, lungs, heart, head and spine, teeth, digestive organs, bladder and kidneys, and finally on "having babies."

Here, in part, is what the lay reader is told about X-rays of the head and spine:

> "The part of the head most often X-rayed, aside from the teeth, is the sinuses—that group of little caves inside your skull that are connected with the back part of your nose by tiny openings. There are two just above your eyes—the frontal sinuses; one on each side of your nose called the antrums; and some more behind and between your eyes. If you've ever gone to a nose and throat

specialist because you had a bad cold and the nagging headache that sometimes goes with it, he probably took you into a dark room and put a tiny light first in your mouth and then near each eye. This was to see whether your sinuses were full of air, as they should be.

"If your nose is badly stopped up for long, the infection may back up through those tiny openings into your sinuses. They may get inflamed and swollen and even filled with pus which, if it isn't cleared right up, can get in your blood stream and cause rheumatism and other troubles just the way abscesses of your teeth can. So if your physician's light doesn't show perfectly clear, hollow sinuses, he may want to have them X-rayed. Infected sinuses, you see, show up differently from normal sinuses in a radiograph.

"But though the sinuses are commonly X-rayed, the most important part of anyone's head is the brain and this may have to be X-rayed, too. Not often, but when it does, the X-ray examination may mean the difference between life and death if what the physician is looking for is a possible tumor, or a possible blood clot, or an aneurysm which is a weakening and consequent bulging of one of the blood vessels in the brain that may lead to hemorrhage.

"While the brain tissue itself is fairly soft and radiolucent, the brain isn't easy to X-ray because it is enclosed in a hard, bony box—the skull—which, of course, partially prevents the X-rays from showing any variation in the density of the brain tissue or of the blood vessels running all through the brain. Radiologists, however, are able to get around this difficulty by means of rather special technics used only when your physician suspects some serious trouble. Brain surgery has made such tremendous progress lately that discovering any abnormality in the brain or its blood vessels is almost half the battle toward healing the patient.

"This is equally true of tumors of the spinal cord which can be discovered by introducing radiopaque liquid into a part of the spinal column. When a radiograph shows that this liquid can't get through, there must be an obstruction which, in the spinal column, is apt to mean a tumor. Tumors of the spinal column, along with brain tumors, are fairly rare, but when they do occur, it is vital to find them early."

Congratulations are in order to physicians and others who are responsible for this attractive brochure.

T. W.

NEW MANUAL ON DIETARY MANAGEMENT OF HEART PATIENTS

The American Heart Association and its local affiliate, the Washington Heart Association, have issued a new comprehensive diet handbook, "Food For Your Heart," for use by physicians in the dietary management of heart patients. The manual incorporates 9 diets, sample menus, and the latest information on nutrition and heart disease. It dispels many misunderstandings about reducing and special diets, and makes clear the reasons why only physicians should prescribe such diets for patients.

Endorsed by the American Medical Association's Council on Foods and Nutrition, the new guide states that proper diet counts in the prevention and treatment of many kinds of heart disease, hypertension, and of some complications, such as edema.

"Food For Your Heart" was prepared by the staff of the Department of Nutrition, Harvard School of Public Health. Dr. Fredrick J. Stare, Chairman of the Department, headed a special committee of the American Heart Association, composed of authorities in the field, which supervised the preparation of the handbook.

Single copies of the diet manual have been mailed to the Medical Society's membership as samples and as a public service. As a further community service the Heart Association will make copies available without cost to heart patients upon the request of the patient's physician.

The manual is tab-indexed for quick reference. Desirable weights and how to reach them, cholesterol and heart disease, sodium and heart disease, and general dietary principles are discussed. Low sodium diets are so arranged in the manual that the physician has only to mark the diet he wishes the patient to follow, and to indicate the list of foods from which the patient may choose for the day. These foods are listed according to weight and composition (fat, carbohydrate, and protein content), as well as varying levels of sodium restriction, so that the physician will have no difficulty in making quick adjustments in the patient's diet if he so desires. A pocket on the inside cover may be used by the physician for additional instructions to the patient.

WASHINGTON HEART OFFICIALS VISIT SPECIAL HEART EXHIBIT

DR. ROBERT R. MONTGOMERY (left), a member of the Scientific Council of the WASHINGTON HEART ASSOCIATION, and DR. JOHN A. REISINGER (center), a member of its Board, discuss some of the heart exhibits at the Medical Museum of the Armed Forces Institute of Pathology with COLONEL HUGH R. GILMORE, Curator of the Museum. Colonel Gilmore is holding a heart model (actual size).

A delegation from the Association accepted an invitation to view critically the special exhibit at the Museum on heart and circulatory diseases which was set up for the month of February to coincide with the 1953 Heart Fund Appeal.

While the American Heart Association does not endorse any specific low sodium foods or salt substitutes, the book lists for the convenience of both doctor and patient a number of national manufacturers of low sodium products.

The need for the new comprehensive diet handbook was indicated, the manual points out, by the wide approval and reception by the medical profession of the "Cook Book for Low Sodium Diet" prepared in 1950 by the Massachusetts Heart Association. Many of the recipes and tables in that booklet are incorporated in "Food For Your Heart."

CALENDAR OF SPEAKERS

The following members of the Medical Society of the District of Columbia have addressed lay groups during the past several weeks. The Society maintains a Speakers Bureau, sponsored by the Committee on Public Relations, through which requests for speakers for lay groups, including radio programs, can be filled.

Date	*Speaker*	*Subject or Title*	*Organization*
January 28	Dr. Charlotte P. Donlan	Cancer Detection	Chevy Chase Business and Professional Women
February 1	Dr. Julius Schreiber	Mental Health and the Community	Young Adults Forum, Adas Israel Congregation
February 3	Dr. Eugene J. McDonald	Evaluation of Placentography in Late Bleeding of Pregnancy	Registered X-ray Technicians of Washington
February 17	Dr. Julius Schreiber	The Dynamics of Intergroup Tension	Adult Education Forum of Baltimore
February 19	Dr. Julius Schreiber	Doing Our Jobs as Parents	McLean Gardens Parent-Teachers Association

KOBER LECTURER FOR 1953

Dr. William P. Herbst, the District Medical Society's choice for the George Martin Kober Lecturer for 1953, will deliver the Lecture at Gaston Hall, Georgetown University, on March 25, at 8:15 p.m. The subject of the address will be "Relativity of Chemical Factors Involved in Cancer of the Prostate and Metabolic Research." Dr. Herbst is eminently qualified for the lectureship and particularly to discuss the subject he has selected. He has devoted nearly his entire career in medicine to the field of genitourinary surgery.

Dr. Herbst graduated from Georgetown University School of Medicine in 1915; he had only completed his internships at Georgetown and Columbia hospitals when he was called to active duty with the United States Navy in World War I. After the War he accepted a fellowship at the Mayo Clinic, Rochester, Minn., and for five years devoted himself to the study of surgery and urology. He practiced general surgery in Minneapolis for a time and became a member of the staff of the University of Minnesota Hospital. Returning to Washington in 1933, he devoted himself exclusively to genitourinary surgery and has continued his practice in the District of Columbia without interruption.

In 1935 Dr. Herbst was appointed Professor of Clinical Urology at Georgetown University School of Medicine; 11 years later, 1946, he was made Professor of Urology and Chief of the Urological Service at Georgetown and Gallinger Municipal hospitals. He resigned from the faculty of Georgetown University in 1948. He is presently civilian consultant in urology to Walter Reed Army, U. S. Naval, and Gallinger Municipal hospitals. He is also on the consulting staffs of Columbia, Sibley, Georgetown, Garfield, Doctors and Emergency hospitals.

Dr. Herbst was President of the Medical Society of the District of Columbia in 1946–47. Following his term of office as president, he was elected to the Executive Board, from which he retired as Chairman in June, 1951. He had also served on the Executive Board prior to his presidency of the Society; through the years he has also been active on many of the Society's committees. He has served as Chairman of the Section on Urology of the American Medical Association. He is Past President of the Washington Urological Society, a Fellow of the American College of Surgeons, and a diplomate of the American Board of Urology. Other organizations with which he is affiliated are the American Association of Genito-Urinary Surgeons, the Washington Academy of Surgery, and the Minneapolis Surgical Society.

Dr. Herbst has a personal interest in the Kober Lecture since it was his great-uncle, Dr. George M. Kober, who, while Dean of the Georgetown University School of Medicine, in commemoration of the Fiftieth Anniversary of his graduation, created a fund, the income of which was "to be used annually in awards for lectures by men who have contributed to the progress and achievement of the medical sciences or preventive medicine. The lectures to be delivered under the auspices of Georgetown University in Washington, D. C., and to be published as a continuation of a series of lectures inaugurated March 28, 1920, as a vindication of Animal Experimentation."[1]

WILLIAM P. HERBST, M.D.

Under the provisions of the Lectureship, the Medical Society of the District of Columbia is privileged to select the Lecturer every third year from its own membership or from members of the Washington Academy of Sciences, the National Tuberculosis Association, and the Washington Anthropological Society. In alternate years the selection is made by the Association of American Physicians and the Association of Military Surgeons.

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[1] M. Ann. District of Columbia, 1938, 7, 80.

PROGRESS OF THE MEDICAL SOCIETY'S BLUE SHIELD PLAN

A Report to the Committee on Medical Care*

DONALD STUBBS, M.D.

President, Medical Service of the District of Columbia

It is most fitting that this report be given to the Medical Care Committee of the Medical Society of the District of Columbia. It is my hope that the information I am able to contribute with regard to the activities of Medical Service during the past 4½ years will bring the records of the Medical Care Committee up to date with respect to the voluntary prepayment plan for surgical and obstetrical care which the Committee organized and developed in conjunction with the Medical Society and its Executive Board. The activities of Medical Service have been regularly chronicled through the Medical Service *Bulletin*, the MEDICAL ANNALS, special announcements by the President, and the Annual Report of the Board of Trustees to Participating Physicians. This is, however, to the best of my knowledge, the first attempt made to summarize the activities of the Plan for the Medical Care Committee, which was, to a great extent, responsible for the Plan's very existence.

Following approval by the membership of the Medical Society in 1946, Medical Service developed the necessary subscriber contracts and physician agreements and, utilizing the services of Group Hospitalization, Inc., as its agent, first offered voluntary prepaid surgical and obstetrical coverage to the public on April 1, 1948. Since that time, as you know, the Plan has had numerous growing pains and, in accordance with the symptoms, an unusual growth.

From the beginning the Plan's enrollment was unusually high. As of December 31, 1948, only 9 months after actually beginning business, there were 111,867 participants enrolled in Medical Service. At the present time there are more than 365,000 participants enrolled in Medical Service, a number which exceeds the enrollment of Group Hospitalization at the time Medical Service began operations. This unusually high initial enrollment was desirable in order to obtain strong public support at the start, but it was obtained at the calculated expense of an adverse selection of risk. At the time enrollment was begun, any employee in a Group who held a Group Hospitalization contract was eligible to apply for a contract with Medical Service. Those people most in need of surgical care and most likely to utilize the obstetrical benefits enrolled in the Plan without hesitation, and this poor selection of risk undoubtedly contributed to an unusually high incidence of claims in the second year of the Plan's operation. Also, it was only in the second year of the Plan's operation that the incidence of obstetrical care could be determined, since obstetrical benefits were not covered during the first 10 months of the subscriber's participation in the Plan. Under these adverse circumstances, adjustments were made, effective December 1, 1949, so that new subscribers would be acceptable only if a certain percentage of the Group enrolled with them. Thus the risk factor became more favorable for the Plan. Also, a limitation was placed on benefits for tonsillectomies and adenoidectomies so that benefits would be provided for such an operation only after the contract had been in effect for more than 10 months. In addition, our Claims Department took a more severe attitude with regard to questionable claims. At the same time, the Plan was liberalized to the extent of providing a 10-month waiting period for preëxisting conditions, in comparison with the previous permanent exclusion of conditions known by the subscriber to be preëxistent.

The benefits to be obtained from the new enrollment regulations could not easily be measured, and it was understood that they would not have an immediate effect upon the adverse risk selection which was then affecting the Plan. Medical Service began without any capital, and in May of 1950 the Plan was operating at a deficit, had no reserves, and was indebted to Group Hospitalization for its share of the operating expenses for the preceding 5 months. In order that the Plan might survive, the Board took action to pay physicians 60 cents on the dollar effective June 1, 1950. Because 60 days' notice was required by the contract for such a change, announcement was made to subscribers that subscription dues would be increased 20 per cent, effective October 1, 1950. This placed the monthly rate at $1.00 for individuals and $3.20 for families. Since that time the Plan has operated with an excess of income over expense, and $395,000 which was owed to physicians who supported the Plan from June through December, 1950, was repaid in October, 1951. At the present time, Medical Service has $820,000 in reserve, which still falls somewhat short of the amount recommended by the National Association of Insurance Commissioners as a minimum reserve.*

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* Presented, January 30, 1953, before a meeting of the Medical Society's Committee on Medical Care, of which Dr. Stubbs is a member.

When the Plan began to function, there were 751 Participating Physicians, all of whom were members of the D.C. Medical Society. In the beginning, no provision was made for participation in the Plan by physicians who were not members of the D.C. Medical Society, and the injustice of this situation soon became apparent. In March, 1948, the Board provided for the participation of physicians from other medical societies who would agree to conform to the rules governing the operation of Medical Service. At present, there are 1,573 Participating Physicians, 269 of whom are members of other medical societies.

Medical Service is only one of 78 Blue Shield Plans providing 24,000,000 people with a means of budgeting for a large part of their medical expense. Conforming in all ways to the standards established by the Blue Shield Medical Care Plans, the Board of Medical Service voted to become affiliated with Blue Shield in September, 1948, and Medical Service has been active in Blue Shield affairs since that time. Early in 1949 the Plan sought and received the seal of acceptance of the American Medical Association.

One of the criticisms directed at prepayment plans has been that the protection they offer is available only to employed groups, and this was true of Medical Service. However, in 1950 the Board authorized Medical Service to offer the Surgical Plan to persons who were not eligible, for one reason or another, to enroll through a group. Enrollment in the non-Group program, which is being very carefully underwritten, has continued at rates approximately 20 per cent higher than the rates paid by Group subscribers, and we now have more than 3,000 participants who have been enrolled directly.

In view of the Plan's precarious financial position during the first 3 years of operation, the scope of its program and its payment for services remained somewhat static. However, in September, 1951, the Board learned that Group Hospitalization anticipated an increase in its subscriber rate and, feeling that it was desirable to make any needed changes in Medical Service subscription rates at this same time, the Board requested the Executive Committee to study the problem of a new contract, with a rate increase to subscribers allowing for increased fees to physicians, which had been held below even minimum rates in an effort by the profession to give the Plan a good start with a broad base actuarially more stable. This also allowed increased subscriber income levels, benefits for office surgery, and such other services as the Executive Committee might recommend.

A study had been under way since early 1951 to expand about 250 original procedures in the Schedule of Fees to the procedure listing recommended by the Blue Shield Commission which consisted of some 1,200 items. On October 29, 1951, the Board recommended that fees to physicians be increased approximately 20 per cent to allow for more equitable leveling and balance, and, correspondingly that the income ceilings be increased from $2,500 to $3,000 and from $4,500 to $5,500 for the Individual and Family contracts, respectively. At the same time, the Board recommended that the Plan's program be expanded to provide benefits for home and office care for a limited group of surgical procedures, and recommended that the rate to the subscriber be increased sufficiently to support the new program. The expanded schedule of procedures was related to the Plan's claims experience for the preceding year and the fees were increased an average of 20 per cent. New contracts were drawn up, approved by Legal Counsel, and rushed to the printers. Announcements, forms, invoices and supplies were ordered. Administrative procedures were geared to announcement of the new program in December, to provide the 60 days' notice to subscribers required by the contract prior to any change in subscription rates. The new program went into effect March 1, 1952. It was this whole series of rushing events which forced the Board to action.

In February, 1952, a special meeting was called at the request of Participating Physicians who voiced some objection to the Board's action in raising the income ceilings of subscribers. A number of the problems affecting Participating Physicians were aired at that time. As a result, the Board amended its By-laws to provide that fee schedules and income ceilings would be changed only by the approval of the majority of the Participating Physicians, took under advisement a request that suburban medical societies be given representation on the Board of Trustees, and authorized a committee to consider expansion of the Plan to provide benefits for medical care.

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* A sum equal to at least 3 months' operating expense is considered the minimum reserve desirable.

The Physicians' Services Committee was originally composed of 3 members. Subsequently, the Committee was increased to 6 members and, in 1952, it was increased to 9 members. The present membership of the Physicians' Services Committee represents various specialties, and a diversified as well as specialized opinion is available in the consideration of cases which the Committee reviews. With one exception, there are now alternate members for all those who serve on the Committee, and the Physicians' Services Committee has, in effect, absorbed the functions of the former Physician Relations Committee along with its own duties. The Physicians' Services Committee meets about once a month and reviews approximately 350 cases a year. Its members are hard-working, conscientious men interested in the future of Medical Service, and they have done a splendid job in applying good medical opinion to some of the daily problems with which the Administration is unable to cope.

In July, 1952, the Board approved in principle an experimental program providing medical care, X-ray and laboratory services for hospitalized patients, and recommended that a meeting of Participating Physicians be called for general discussion of the subject. A special meeting of Participating Physicians was called to discuss the experimental medical care program, and it was approved in principle. The Board then referred the proposed program to a special committee, which has made recommendations, and it is expected that a carefully worked-out plan will be made available to a small percentage of our subscribers in the very near future.

I want to stress that from the beginnings of both Plans, there has been strict adherence to the philosophy that hospital services and professional medical services are separate and distinct. Group Hospitalization has never paid hospitals for such services as anesthesia, X-ray or laboratory. Medical Service has always paid Participating Physicians for these services. We believe that physicians and hospitals should support this distinction in the interest of best patient care.

Another important consideration at the present time is the possible expansion of the Board of Trustees to include representation from the adjacent medical societies in Virginia and Maryland, and additional public members. This matter has been referred to the Executive Board of the Medical Society for concurring approval.

In reviewing the activities of Medical Service during the past 5 years, some measure of the Plan's progress may be obtained from the following facts:

The enrollment of Participating Physicians has grown from 751 at the Plan's inception to 1,573 as of December 31, 1952.

The cost of operating the Plan has been reduced from 14.5 per cent of subscription income at the end of 1948 to 9.5 per cent for the year 1952.

Payment to physicians has increased from $1,209,000 for the year 1949 (the first complete year for which figures are available) to $3,200,000 for the year 1952.

The Plan's reserve on December 31, 1949, was $26,700; at the end of 1952 it was $820,000, including over $300,000 invested in approved securities.

Subscription enrollment at the end of 1949 was 198,000. At the end of 1952, the Plan had 365,000 participants.

During 1953 we anticipate a continuing increase in enrollment, a continuing though slower addition to reserves, a continuing reduction in the operating expense, and further expansion of the program. Medical Service, at the present time, is a dynamic, vigorous and necessary aspect of our community life. The healthy growth of the Plan requires the full support of the subscribing public and the Participating Physicians. We are looking forward to the establishment of a medical care program in the near future which, while initially on an experimental basis, should provide the necessary actuarial details upon which a permanent program can be established. We are hoping to obtain a charter for Medical Service through the Congress of the United States. We hope to explore the feasibility of expanding the program to provide additional benefits, and we ex-

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THE WASHINGTON SCIENCE FAIR: ITS SCOPE AND PURPOSE

KEITH C. JOHNSON, M.A.

Chairman, Science Fair Committee for the District of Columbia; Head, Department of Science, Division 1, Public Schools of the District of Columbia

When nearly 3,000 junior and senior high school youth of the Washington area prepare projects and exhibits for local school, county and area science fairs, there must be something that challenges their enthusiasm. Material gain in the way of prizes does not account for this great interest, for no prizes, no scholarships, no money awards are given. A key and a certificate are awarded to some of the exhibitors in recognition of especially excellent work, and four exhibitors, 2 boys and 2 girls, are selected to represent the Washington Science Fair at the National Science Fair held each year. The *Washington Daily News* sponsors the trip for these students, paying all their expenses and those of a chaperone. The National Science Fair will be held this year in Oak Ridge, Tenn., and is open only to senior high school students. The Armed Forces Medical Museum selects a few projects to exhibit there for a month, usually during May.

Aside from the above-mentioned recognition, the acceptance of their project in the Science Fair is the only award the students get. In spite of this, interest in the Science Fair grows and more students work for the Fair each year.

Of course, not all 3,000 students are invited to exhibit in the Washington Science Fair. Space limitations allow only about a quarter this number; local and county competition eliminates the others.

What is this Science Fair now in its seventh year? Who sponsors it and who may enter? What are its purposes and of what value is it in education of youth today?

John Dewey believed that children should learn by doing and thinking. Education has moved in this direction for nearly half a century. In this country, during the last 10 years, science laboratory work (the "doing" part of science education) in secondary schools has been deëmphasized, partly through lack of time. For many years double length periods were available for laboratory work. Washington schools, along with many other city schools throughout the Nation, have lost that double period. A science fair thus offers a means of filling the gap caused by loss of laboratory time and has become important to science students who learn by doing.

Youth are still interested in doing. The opportunity to show what they can do, to exchange ideas with one another and with recognized scientists, and to work on problems of their own choosing gives them a tremendous stimulus for "doing." In solving their problems the students often progress far beyond the limited knowledge of their teachers in that field and often tax the limitations of their advisors. Original research work often is involved. On the other hand, many students like to make and show things which involve scientific and mathematical principles. These students are the gadgeteers, if you will. Almost all branches of science are utilized by students in presenting their ideas and their achievements.

By recognizing their achievements in a dramatic way, the Science Fair encourages students to develop their "doing" ability. Beginning early in the school year, teachers announce the dates, assist students to select a project, give some class time to discussion, and bring the students in contact with scientists and engineers for help in developing projects. Encouragement is given to all who are interested. Local school fairs are held. In Prince Georges County a county science fair is held with participants from most of the schools in that area. Elimination of many projects takes place in these local fairs.

Some teachers require their students to prepare a project or a research paper in order to qualify for an A or B grade in science. Others can only suggest that a project might help get that A or B the student may want. Such projects turn up in a science fair and often bring recognition beyond the grade given for it.

The study of science can be fun and it is a lot of fun to exhibit in a science fair. It can be hard work too. For those with talent in science and mathematics an opportunity is given to compare their talent with similar talent from other schools. Students are thus better able to select a field for more serious work later on. Or, the projects started for a fair may become the life work of the student. They may prepare him for the Science Talent Search in the senior year in school, which is conducted for

Westinghouse Education Foundation by Science Clubs of America.

One has to see a science fair to realize the broad interests of youth. Botany, zoology, chemistry, physics, electronics, health, mathematics, physical geography, engineering and conservation are areas usually represented. Cancer, antibiotics, drugs and drug addiction, and many other health problems have received careful consideration. Atomic energy, rocket construction, and weather instruments were among the subjects viewed at one of these fairs. A limited number of catalogs of exhibits of past science fairs and a brochure describing the 1953 Science Fair are available to any one writing the author. The catalog reflects the wide interest students have in science study.

In the hands of alert and hard-working teachers, the opportunities for stimulating interest in science offered by the Science Fair are almost limitless. Those of us who have worked with it the past 6 years look back with great satisfaction upon the achievement of many exhibitors. Parents frequently report the excellent progress of their children in college and often give credit to the stimulus given by the Science Fair. A number of former exhibitors are well on their way toward their M.D. and Ph.D. degrees. The Science Fair played no small part in starting them on their way by giving them an interest in science.

Teachers are essential to the success of any science fair. Enough cannot be said for those who contribute fully of their time and energy in order to make available to their students all possible sources of information.

Scientists and educators are our judges. Seventh grade exhibits, eighth and ninth grade exhibits, and senior high school exhibits are judged separately. Each exhibit is judged by three judges for scientific thought, originality of concept, thoroughness, ingenuity, technical skill and workmanship, and dramatic value. Any one who has helped to judge one of these science fairs knows what hard work it is and yet many have returned to serve again. There is fun and camaraderie in it.

This year the Washington Junior Academy of Sciences for the first time is managing the Science Fair. Sponsoring groups, Science Service, the Washington Academy of Sciences and its affiliated organizations, including the Medical Society of the District of Columbia, a number of engineering and architectural societies, and others are providing funds. These funds are managed by the Junior Academy and supervised by the treasurer of the senior Academy. No commercial sponsorship of any kind has been asked; it is the preference of all concerned that it be kept free of any commercial alignments.

American University is host to the Seventh Science Fair this year. Space and faculty and student coöperation have been made available to the committee.

Talent can be discovered and recognized and rewarded. Hopes are high for the future of the Science Fair. Its continued support by the scientific societies of Washington has stirred a broad community interest in the scientific education of our youth. There is renewed faith in our youth as a result. Youth is capable in scientific fields. It is up to us adults to continue to challenge youth by providing the opportunity to show what youth can do.

MEMBERSHIP

The following applicants for membership were duly elected to membership at the meeting of the Executive Board, January 26, 1953, in accord with Amendment XI, Section 2, of the Constitution and By-laws of the Society.

Active Members

J. Frederick Barr, 8403 16th Street, Silver Spring, Md.
Stanley W. Bergreen, 4287 6th Street, S.E.
Leo H. T. Bernstein, 1541 Montana Avenue, N.E.
William W. Cardozo, 3521 New Hampshire Avenue, N.W.
Ralph John Cole, 5718 Chillum Heights Drive, Hyattsville, Md.
LeEarle B. Drake, 2801 Quebec Street, N.W.
Mary S. B. Fisher, 2039 New Hampshire Avenue, N.W.
Claudine M. Gay, 403 East Capitol Street
J. Robert Gladden, 1515 Michigan Avenue, N.E.
Harry W. Gray, 2017 Massachusetts Avenue, N.W.
Aston B. Greaves, 1443 Maryland Avenue, N.E.
Frederick C. Heath, 750 Delafield Street, N.E.
Charles H. Kelley, 1217 Hamlin Street, N.E.
Robert T. Kelley, 1736 Hobart Street, N.W.
Karl H. Klopfenstein, 1746 K Street, N.W.
Gaines K. Palmes, Garfield Memorial Hospital
Howard C. Pierpont, 1221 South Taylor Street, Arlington, Va.
William B. Russell, 1835 Kalorama Road, N.W.
John D. Schultz, Jr., 1304 Linden Lane, Silver Spring, Md.
Harvey N. Shapiro, 3200 16th Street, N.W.
Charles M. Weber, 3130 Wisconsin Avenue, N.W.
Harold Horatio Whitted, 1249 Irving Street, N.E.

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News and Personals

The first Western Hemisphere Conference of the World Medical Association will be held in Richmond, Virginia, from April 23 through April 25, 1953. **Dr. George C. Ruhland** has been appointed by the District Commissioners to represent the District of Columbia.

Three Postgraduate Courses of the American College of Physicians, scheduled for late spring, may be of interest to members of the Medical Society. They are:

Course No. 5. Cardiovascular Diseases, 1953: April 27–May 2, Philadelphia institutions, Philadelphia, Penna.; Dr. William G. Leaman, Director.
Course No. 6. Controversial Issues in Internal Medicine: May 11–15, Pennsylvania Hospital, Philadelphia, Penna.; Dr. Garfield G. Duncan, Director.
Course No. 7. Electrocardiography: Basic Principles and Interpretation: May 11–16, Massachusetts General Hospital, Boston, Mass.; Dr. Conger Williams, Director.

Fees for Courses 5 and 6 for Fellows of the College are $30 and for non-members, $60; for Course 7 the fees are $60 for members and $120 for non-members.

All registrations must be made through the Executive Offices of the College, 4200 Pine Street, Philadelphia 4, Pa.

The 1953 meeting of the American Goiter Association will be held in the Drake Hotel, Chicago, May 7, 8 and 9. Inquiries regarding the meeting should be addressed to Dr. George C. Shivers, Corresponding Secretary of the Association, Colorado Springs, Colo.

The Sixth Annual Postgraduate Course on Diseases of the Chest, sponsored by the Council on Postgraduate Medical Education of the American College of Chest Physicians and the Laennec Society of Philadelphia, is scheduled for March 23–27 at the Bellevue-Stratford Hotel, Philadelphia. Fee for the course is $50. Applications should be addressed to the American College of Chest Physicians, 112 East Chestnut Street, Chicago 11, Ill.

Dr. J. Winthrop Peabody, Professor of Diseases of Respiratory System at Georgetown University School of Medicine, will preside at the opening session, March 23.,

The Ninth Annual Congress and Graduate Instructional Course in Allergy of the American College of Allergists, Inc. will be held at the Conrad Hilton (The Stevens) in Chicago, April 24–29. Fee for the Graduate Instructional Course (April 24–26) is $50, which includes three round table luncheons. Credit for attending this Course will be acceptable toward the required 100 hours of informal study by the American Academy of General Practice. Application should be made to the Secretary-Treasurer, American College of Allergists, 401 LaSalle Medical Building, Minneapolis 2, Minn.

Dr. Harry S. Bernton, Washington, who has recently been elected to the Board of Regents of the American College of Allergy, will be chairman of the morning session, April 25, for the Instructional Course and will give a paper on "Diagnosis of Nasal Allergy." He will also discuss "Food Allergy" at a round table luncheon, April 24.

The Third National Conference on Placement of Severely Handicapped will convene, March 23–25, in the American Legion auditorium at 1608 K Street, N.W. The conference will bring together physicians, educators, representatives of business and industry, labor, veterans, Government counseling and placement specialists, and the handicapped themselves, to pool their knowledge and experience in furthering employment of severely handicapped.

Members of the Medical Society who will participate in the Conference are: Drs. Pearce Bailey, Darrell C. Crain, James J. Feffer, Samuel Fishman, Francis M. Forster, Walter Freeman, Verne K. Harvey, Charles A. Hufnagel, David Leibovici, Thomas F. McMahon, H. L. Phillips, William T. Spence, and Jean J. Vivino.

Among the disabilities to be discussed will be those resulting from arthritis, amputations, cerebral

CALENDAR OF MEETINGS, JANUARY 16—FEBRUARY 15

January 16	Committee on Medical Ethics and Deportment Washington Psychiatric Society
January 19	Board of Censors Washington Academy of Surgery
January 21	Board of Censors Section on Radiology George Washington University Medical Society
January 22	Committee on Medical Ethics and Deportment Committee on D. C. Survey of Medical Care of Indigents Health Section, United Community Services
January 23	Washington Psychoanalytic Society D. C. Chapter, American Federation for Clinical Research
January 26	Executive Board Subcommittee of Committee on Medical Care Joint Meeting of D. C. and Potomac Societies of Anesthesiologists Physician-Veterans of World War II
January 27	Grievance Committee Section on General Practice
January 28	Lay Society, Diabetes Association of D. C.
January 29	Committee on Medical Ethics and Deportment
January 30	Committee on Medical Care Committee on Public Relations
February 2	Committee on Arrangements, 24th Annual Scientific Assembly Graduate Nurses' Association
February 3	Membership Luncheon Registered X-ray Technicians of Washington
February 4	Executive Board, Woman's Auxiliary Graduate Nurses' Association
February 5	Committee on Medical Bureau Section on Neurology and Psychiatry Executive Committee, D. C. Survey of Medical Care of Indigents Executive Committee, Gallinger Hospital Nursing Bureau, D. C. Health Department
February 6	Grievance Committee Committee on Public Policy Section on Dermatology and Syphilology Scientific Meeting, D. C. Pharmaceutical Association and Medical Society Washington Psychoanalytic Society
February 9	Board of Censors Subcommittee on Mental Health Physician-Veterans of World War II
February 10	Membership Luncheon Subcommittee on Alcoholism Program Committee, 24th ASA Medical Officers' Reserve Units Lay Society, Diabetes Association of D. C.
February 11	Section on Gastroenterology Woman's Auxiliary
February 12	Committee on Exhibits, 24th ASA
February 13	Joint Staffs of Emergency, Garfield and Episcopal Hospitals

palsy, epilepsy, blindness, deafness, poliomyelitis, muscular dystrophy, multiple sclerosis, cardiovascular and pulmonary disabilities.

Registration fee for all general sessions, workshops and panels, with a copy of the proceedings of the Conference when published, is $5. Single-day registration is $2. Registration is being handled by Miss Mildred Scott, Secretary-Treasurer, American Federation of the Physically Handicapped, 1370 National Press Building, Washington 4, D. C.

A new series of lectures, to be known as the **National Institutes of Health Annual Lectures,** was inaugurated, January 21, with Dr. Severo Ochoa, Professor of Biochemistry of New York University College of Medicine, as the guest speaker. The purpose of the Lectures, according to Dr. W. H. Sebrell, Director of the Institutes, is to "facilitate the exchange of information among research scientists and to recognize outstanding scientific achievement, such as Dr. Ochoa's."

Each year eight lectureships will be awarded by the Office of the Director and the seven research Institutes which comprise the National Institutes of Health, the principal research arm of PHS. Lecturers will be nominated by senior investigators in the various Institutes and chosen by a committee composed of the Scientific Directors of the seven Institutes. Each lecturer will be invited to spend several days at Bethesda leading informal seminars and consulting with scientists interested in his particular field.

All lectures are open to the scientific staffs of NIH and other medical, teaching and research institutions throughout the Washington Metropolitan Area. At the end of each year the eight lectures will be published in a single volume and distributed to scientific institutions.

The schedule for 1953 follows. Announcement of the exact date will be made in advance of each lecture.

Month	*Sponsor*	*Lecturer*
January	National Heart Institute	Dr. Severo Ochoa
February	National Institute of Neurological Diseases and Blindness	Dr. Douglas N. Buchanan
March	National Cancer Institute	Dr. Bradford Hill
April	National Institute of Mental Health	Dr. Harold G. Wolff
May	National Institute of Arthritis and Metabolic Diseases	Dr. C. N. H. Long
September	Office of the Director, NIH	To be announced.
October	R. E. Dyer Lecture	To be announced.
November	National Institute of Dental Research	Dr. W. D. Armstrong
December	National Microbiological Institute	Dr. Louis K. Diamond

Residents Night will be observed by the **Washington Psychiatric Society**, Wednesday, March 25. The winning essay in a prize contest for resident physicians will be presented at this meeting and the author will receive a $100 cash award. The paper which was considered second best by the awards committee will also be read. Dr. Robert T. Morse, chairman of the awards committee, states that many papers have been received, indicating greater interest in the contest than had been anticipated. The members of his committee are Drs. Addison M. Duval, Z. M. Lebensohn and T. Douglas Noble.

On April 15 the Society will have a guest speaker, Dr. Frederick H. Allen, Director of Child Guidance Clinic of Philadelphia. He will speak on "Modern Trends in Child Psychiatry." Discussion will be opened by Dr. Reginald S. Lourie, Director of Psychiatry at Children's Hospital, Washington.

These meetings will be held in the Medical Society's auditorium, as usual, at 8:30 p.m.

The Graduate Nurses' Association and the District of Columbia Division of the American Cancer Society are sponsoring jointly an all-day meeting at the Hotel Statler, March 24, beginning at 9 a.m. There will also be an evening session at 7:30, which will consist of a panel discussion by experts on problems which arise with a cancer patient. Further information regarding the day's program may be secured by calling the Cancer Society, Executive 3-3690.

Dr. William P. Argy, Medical Director of the District of Columbia Society for Crippled Children, Inc. has sent the Secretary of the Medical Society the following schedule of lectures which are currently being given for parents of cerebral palsied children at its headquarters, 1767 Massachusetts Avenue, N.W. The lectures begin at 8 p.m.

February 13: "Reaction of Siblings to a Brain Damaged Child," Dr. Margaret M. Nicholson
March 13: "Psychological Characteristics of the Brain Damaged Child," F. A. Indorf
April 17: "Occupational Therapy in the Home for the Brain Damaged Child," Mrs. Elizabeth Grayson
May 8: "Speech Technics for Brain Damaged Children," Dr. Hugh James Laughery

The Society for Crippled Children is also holding its third series of afternoon lectures for professional workers whose duties concern the disabled child. Physicians are cordially invited to attend any of the following lectures as well as those listed above. The afternoon series is also being held at the Headquarters of the Society for Crippled Children, 3:30 to 4:30 p.m. The schedule follows:

Disturbances in Cerebral Dominance

Feb. 11	"Auditory Perceptual Disturbances"	Dr. T. Frasier Williams
Feb. 19	"Visual Motor Disturbances"	Dr. Frank D. Costenbader
Feb. 26	"Language"	Dr. Othmar Solnitzky

March 4	"Behavioristic Pattern"	Dr. Jerome Hayden
March 11	"Psychology of the Brain Danaged Child"	Dr. Harry Bice

Convulsive Phenomena

March 16	"Convulsive Seizures"	Dr. Francis M. Forster
March 25	"Electroencephalogram"	Dr. Bushnell Smith
April 16	"Drug Therapy"	Dr. Theodore Koppanyi
April 22	"Surgical Procedures"	Dr. O. Hugh Fulcher
April 29	"Psychological and Psychiatric Considerations"	Dr. Dorothy Donley Dowd
May 6	"Educational Provisions for the Brain Damaged Child"	Dr. Romaine Mackie

The Washington Medical and Surgical Society will hold its March meeting on the fourth Monday, March 23, at the Hotel 2400. A paper on "Problems and Accomplishments in Reconstructive Surgery" will be presented by Dr. Alfred J. Suraci. His paper will be discussed by Drs. Calvin T. Klopp and Ray F. Guynn. A case report will be presented by Dr. L. A. Craig, Jr.

The Metropolitan Washington Tuberculosis Conference will be held in Washington, D. C., April 9, in the Federal Security Building, North. The meeting this year has been arranged by the Virginia Chapter of the Academy of General Practitioners and attendance of general practitioners of the entire Washington Metropolitan Area is urged. The guest speaker for the day will be Dr. M. S. Mustard, Executive Director of State Charities Aid Association of New York. Dr. Mustard will give a special address in the morning and in the afternoon will summarize the conclusions reached in the smaller group discussions.

Registration will open at 9:30 a.m. The first meeting will begin at 10 o'clock. There is no registration fee. An invitation is extended to all physicians of Washington and nearby counties to attend.

Dr. Thomas M. Peery will be host to the **Section on Pathology and Laboratory Medicine,** April 17. A paper on "Serologic Tests for Syphilis" will be presented by Dr. Tomas Cajigas.

The D. C. Society of Medical Technologists will hold its Annual Seminar on April 25 at the Willard Hotel. There will be an all-day program, beginning at 10 a.m. and lasting until 5 p.m., with luncheon at 12:30. Exhibits will open at 9 a.m.

The International College of Surgeons is making plans to establish at its headquarters in Chicago a worldwide **Surgeons' Hall of Fame.** Dr. Max Thorek, of Chicago, founder and Secretary-general of the College, initiated the project. Architects are already at work on the blueprints for rebuilding, which will include the design of individual niches for busts of the great surgeons to be commemorated, together with special lighting and bronze plaques detailing their contributions to human welfare.

Those to be permanently honored will be chosen by vote of an electoral college, with representatives from every part of the world. Names will be submitted to this group by the national organizations or by individual surgeons. Dr. Rudolf Nissen, of the University of Basel, Switzerland, is Chairman of the Board of Trustees for the Hall of Fame, and Dr. Morris Fishbein, of Chicago, is Co-chairman.

Dr. John W. Latimer, Chairman of the Scientific Council of the **Washington Heart Association,** announces plans to hold four cardiac clinics each year in local teaching hospitals and institutions in rotation. The first clinic was held the evening of February 11, during National Heart Week, at Walter Reed Army Hospital; Colonel Thomas Mattingly and his staff were hosts. The subject discussed was "Congenital Defects of the Cardiovascular System Amenable to Surgical Correction."

A radioactive **Isotope Laboratory** has been opened and is now functioning at **Garfield Memorial Hospital.** Facilities are available for the use of radioactive iodine and radioactive phosphorus for both diagnosis and treatment.

Dr. Ralph M. Caulk has been appointed Chairman of the Isotope Committee. Commander E. R. King, MC, USN, of the U. S. Naval Hospital, Bethesda, Md., is consultant in charge of the clinical work.

Approval for the usage of radioactive colloidal gold has been obtained from the Atomic Energy Commission, but this aspect of the activity is not expected to be functioning for another month.

The Committee on Medical Motion Pictures of the AMA has completed the fourth supplement to the booklet entitled, "Reviews of Medical Motion Pictures." It contains all the film reviews published in the *Journal of the AMA* from January to December, 1952.

The purpose of the reviews is to provide a brief description and evaluation of motion pictures which are available to the medical profession. Each film is reviewed by competent authorities.

Copies of the supplement may be secured from the Committee on Medical Motion Pictures, American Medical Association, 535 North Dearborn Street, Chicago 10, Illinois.

DR. NICHOLSON HONORED BY GEORGE WASHINGTON SOCIETY

DR. HERMAN S. HOFFMAN (left), President of George Washington University Medical Society, presents DR. MARGARET M. NICHOLSON with the Award of Merit at the Society's annual banquet in the Mayflower Hotel, February 14. MR. NIGEL GAYDON, First Secretary of the British Embassy, guest speaker at the banquet, reads the scroll.

George Washington University School of Medicine held its annual **Alumni Day,** February 14. The day's events began with a conducted tour of the University Hospital at 12:30, followed by luncheon in the Hospital's cafeteria, with the alumni and faculty as guests of the School of Medicine.

Dr. Daniel L. Borden, Clinical Professor of Surgery, was moderator at the scientific session in the afternoon. After an address of welcome by Dr. Walter A. Bloedorn, Dean of the School of Medicine, scientific papers were presented by the following faculty members: Drs. Radford Brown, Charles S. Coakley, Clarence R. Hartman, Alec Horwitz, William C. Meloy, Frederick A. Reuter and Charles W. Thompson.

In the evening members and guests of the **George Washington University Medical Society** gathered for their **27th Annual Banquet and Alumni Reunion** at the Mayflower Hotel. The Senior Class of the School of Medicine, under the direction of Howard Gordon, gave some musical selections. The guest speaker, Nigel Gaydon, First Secretary of the British Embassy, spoke on "Anglo-American Relations."

Dr. Herman S. Hoffman, President of the Society, presided at the banquet and presented **Dr. Margaret M. Nicholson,** pediatrician, with the Society's annual Award of Merit. The committee on awards, he said, was recognizing her especially for her work in the field of heart diseases of the young. He also lauded her for her willingness to assist interns and young physicians, as well as foreign doctors who come to the District of Columbia for study and training.

Dr. Nicholson is the first woman to receive the Society's Award of Merit. She is a graduate of George Washington University (A.B., 1922) and the School of Medicine (M.D., 1925). She has been Clinical Professor of Medicine at the School since 1930.

In 1950 Dr. Nicholson became the first woman to serve as Chairman of the Section on Pediatrics of the AMA; the three years preceding she had been Secretary of the Section. In 1950 she was the AMA's Delegate to the International Pediatrics Congress in Zurich, Switzerland. At the next Congress, to be held in Havana, she will also represent the AMA. She is an Honorary member of the Pediatrics Societies of Mexico and Cuba. She is a diplomate of the American Board of Pediatrics.

Dr. Nicholson is an Active member of the Medical Society of the District of Columbia, a member of the American Medical Association, the Southern Medical Association, the Women's Medical Society of the District of Columbia, and many other scientific organizations. She has been an officer of the District Medical Society's Section on Pediatrics and has served on many of the Society's committees. She is a member of the staff of Children's Hospital.

In addition to her organizational activities, Dr. Nicholson finds time to carry on a large private practice.

The Executive Board of the Medical Society of the District of Columbia held its regular meeting, January 26, 1953.

The following physicians were appointed to serve as chairmen of committees for the 24th ANNUAL SCIENTIFIC ASSEMBLY:

Program:	Dr. Bernard J. Walsh
Exhibits:	Dr. William E. Bageant
Radio, TV and Motion Pictures:	Dr. Roy L. Sexton
Social Affairs:	Dr. Montgomery Blair, Jr.
Attendance:	Dr. Karl C. Corley
Finance:	Dr. Francis X. Courtney
Medical Women's Activities:	Dr. Helen Gladys Kain
Woman's Auxiliary:	Mrs. Richard H. Todd

Drs. Donald Stubbs, William P. Herbst and Arch L. Riddick were nominated to succeed themselves as members of the Board of Trustees of Medical Service. The Board also approved the proposed increase in the membership of the Board from 11 to 15, as requested by the Board of Trustees of Medical Service through its President, Dr. Stubbs. This increase would allow medical societies of adjacent counties in Virginia and Maryland and the public at large to be represented on the Board.

The Board voted to accept from Dr. Eugene J. McDonald a gift of four fluorescent illuminators on a mobile stand for showing X-ray films to replace the obsolete boxes now in the auditorium. A plate showing Dr. McDonald's name as donor will be attached to this equipment.

The Board voted to direct a communication to the President of the United States endorsing Dr. James A. Gannon for District Commissioner.

President Yater submitted the appointment of Dr. A. Clagett Gray as Chairman of the House Committee, succeeding Dr. Victor R. Alfaro, who has resigned, and Dr. Edgar E. Quayle as Vice Chairman. The Board approved both appointees.

Dr. Frederick O. Coe was nominated to succeed himself as a Vice President of the Washington Academy of Sciences representing the Medical Society.

Dr. Maurice A. Selinger was appointed by President Yater to represent the Society at a meeting called by the Board of Commissioners in the Old District Building, January 29, to consider the proposed public works program for the District of Columbia. The Board approved the appointment.

Dr. Edward J. Stieglitz was selected to represent the Society on a new committee of the United Community Services, to be known as the Committee on the Aging.

The Section on Dermatology and Syphilology met with Dr. A. Clagett Gray and Mr. George B. McGovern, Medical Advisor and Manager, respectively, of Medical Service of the District of Columbia, February 6, for a discussion of mutual problems. Dr. Robert Stolar is Chairman of the Section and Dr. Naomi M. Kanof, Secretary-Treasurer.

The Kabat-Kaiser Institute for Neuro-Muscular Rehabilitation closed its Washington Clinic on March 5. Established in 1946 under the medical direction of Dr. Herman Kabat, it was financed largely by Mr. Henry J. Kaiser, the industrialist. Dr. Kabat, who was an Active member of the District Medical Society from 1947 to 1949, left Washington in 1948 to become Medical Director of the Kabat-Kaiser Institute in Oakland, California. Dr. Jean J. Vivino has been Medical Director of the Institute in Washington since 1950.

The Washington Society of Pathologists met, March 4, at the Army Medical Service Graduate

School at Walter Reed Army Medical Center. Two papers were read at this meeting: "Endocardial Fibro-Elastosis," Drs. E. Clarence Rice and David F. Bell, Children's Hospital; "Clinical and Experimental Studies on Hyaline Membrane Disease of the Newborn," Dr. J. B. Morales, Providence Hospital. Some interesting case reports were presented by Dr. Robert S. Jason of Howard University School of Medicine.

Dr. W. Proctor Harvey addressed the **Women's Medical Society,** March 3, at its meeting in the Medical Society's Library. Dr. Harvey, who is Instructor in Medicine at Georgetown University School of Medicine, spoke on "Heart Murmurs."

The D. C. Branch of the Pan American Medical Society elected new officers, December 21. They are:

Dr. W. LeRoy Dunn, *President*; Drs. A. F. Castro, J. Winthrop Peabody and F. R. Leyva, *Vice Presidents*; Dr. Daniel F. Lynch, *Secretary*; and Dr. Harold M. Hobart, *Treasurer.*

The District of Columbia Pharmaceutical Association was host to the District Medical Society at a meeting, February 6, in the latter's auditorium. The principal speaker was Dr. Ivor Griffith, President of the Philadelphia College of Pharmacy and Science, who spoke on "Public Relations of the Physician and the Pharmacist."

Dr. Samuel M. Benjamin was moderator for a panel discussion on joint problems which followed Dr. Griffith's address. Representing the Pharmaceutical Association on the panel were Messrs. Elmer Hillman, A. J. Obert and David Tourkin. Members of the Medical Society who participated in the panel were Drs. Robert U. Cooper, I. Phillips Frohman and Hugh H. Hussey.

The Washington Psychiatric Society elected the following officers at its annual meeting, January 16:

Dr. Douglas Noble, *President-elect*; Dr. Seymour J. Rosenberg, *Secretary*; and Dr. Marshall deG. Ruffin, *Treasurer.*

Dr. Henry P. Laughlin was inducted as President for 1953. Drs. Henry Davidson and Mary Julian White were elected to the Council, which consists of the executive officers and the retiring President, Dr. Zigmond M. Lebensohn.

The Clinico-Pathological Society met, February 17, at the home of Dr. B. Lauriston Hardin. Two case reports were presented: "Fluid in the Middle Ear," Dr. Daniel B. Moffett; "Hypersplenism," Dr. William S. Anderson.

Dr. W. Calhoun Stirling was host to the Hippocrates-Galen Society at the Chevy Chase Club, February 5. The following program was presented: "Fifty Years of Surgery in Washington," Dr. James F. Mitchell; "Fifty Years of Medical Practice," Dr. J. W. Bird; "A New Technic of Ureterosigmoidostomy," Dr. Stirling.

The Instructive Visiting Nurse Society has moved to new offices at 1842 Mintwood Place, N.W. For the past 22 years the Society, a Red Feather agency, has been housed in the Albee Building at 1426 G Street. The new telephone number is Dupont 7-7333. Anyone desiring professional home nursing care should call before 9 a.m. for a morning visit and before 2 p.m. for an afternoon visit.

Dr. Arthur C. Christie, who recently retired from active practice in Washington and is now residing in Crescent City, Florida, was awarded the Gold Medal of the American College of Radiology at the Annual Banquet of the College at the Palmer House, Chicago, February 6. The same award was made to Dr. Edward H. Skinner of Kansas City, Missouri.

Drs. Christie and Skinner were two of the three man Inter-Society Committee for Radiology established in 1937 by the College, the American Roentgen Ray Society, the Radiological Society of North America, and the American Radium Society to conduct a vigorous program for radiology in the area of socioeconomics. The College in its present form, as the organization for all radiologists, was a direct outgrowth of the Inter-Society Committee.

Dr. Christie also took an active part in the 20th Annual Conference of Teachers of Clinical Radiology, which was held, February 7, under the auspices of the Commission on Education of the College. Dr. Christie and Dr. W. Edward Chamberlain, of Philadelphia, led discussion during a morning session on "Radiologist-Hospital Relations and Arrangements for the Practice of Radiology in Hospitals." Dr. Frederick O. Coe, of Washington, was moderator for the session.

Dr. Maurice Protas spent four days in Havana, Cuba, the guest of the Cuban Medical College. The purpose of his visit was to present plans for the formation of a Cuban Diabetic Association, patterned after the American Diabetes Association, with affiliate units consisting of clinical and lay societies. In view of the fact that no statistics on diabetes have ever been collected in Cuba, Dr. Protas stressed the need for diabetes detection, and proposed that Cuba undertake diabetes detection drives, similar to those sponsored by the ADA in the United States.

While in Havana Dr. Protas was the guest of Dr. Fernando Lopez Fernandez, Professor of Medicine at the University of Havana and Director of the Hospital for Contagious Diseases.

Dr. J. Ross Veal lectured in Memphis, Tenn., February 12 and 13. Before the Mid South Postgraduate Assembly, February 12, he read two papers, "Treatment of Arteriosclerosis of the Lower Extremities" and "Management of Acute Arterial Occlusion." On February 13 he addressed the Mid South Anesthetists' Assembly on "The Reversibility of Shock," a paper co-authored with Dr. Arch S. Russell. Dr. Veal is Clinical Professor of Cardiovascular Surgery at Georgetown University School of Medicine.

Dr. Harry S. Bernton was co-author of a paper presented before the meeting of the American College of Allergy in Boston, February 26–28. Entitled "The Chemistry of Allergens. XII. Proteolysis of the Cottonseed Allergy," the paper was a contribution from the Allergens Research Division of the U. S. Department of Agriculture.

District Health Officer Daniel L. Seckinger has appointed a five-man committee to assist him in the problem of properly identifying persons suffering from diabetes and epilepsy who are discovered in a public place in an unconscious or semi-conscious condition, so they can be taken immediately by the District police to a hospital for treatment. The committee consists of: Dr. Leopold E. Wexberg, Director of the District Bureau of Mental Hygiene and the Alcoholic Rehabilitation Center; Dr. Philip A. E. Stebbing, Superintendent of Gallinger Municipal Hospital; Dr. John R. Pate, of the District Health Department's Chronic Disease Division; Dr. Joseph W. Stein, an Associate member of the District Medical Society; and Deputy Police Chief Howard V. Covell.

Dr. Murray M. Copeland and Dr. Julius S. Neviaser attended the meetings of the American Academy of Orthopedic Surgeons at the Palmer House, Chicago, January 23–29. Dr. Neviaser, who is Assistant Clinical Professor of Orthopedic Surgery at George Washington University School of Medicine, gave an instructional course lecture, January 26, on "Frozen Shoulder." Dr. Copeland, Professor of Oncology, Georgetown University School of Medicine, gave two instructional course lectures, "Cartilaginous Tumors of Bone and Their Differential Diagnosis" and "The Effect of Ionizing Radiations on Bone and Skeletal Muscle." Dr. Copeland also participated in a discussion of five papers presented at the Bone Tumor Symposium.

Brigadier General (recently Colonel) William L. Wilson, MC, USA, affectionately known to many Washington physicians as "Blackie" Wilson, has been assigned the post of Chief Surgeon of the Seventh Army in Germany. General Wilson has served the past few years as Assistant Administrator of the Federal Civil Defense Administration in charge of Health and Welfare. In the issue of *Civil Defense Review* for February 11, 1953, the Secretary of the Council on National Emergency Medical Service of the AMA states that Dr. Wilson was able "to maintain the complete confidence and coöperation of his profession during his tour of duty and his guidance and advice have been of particular assistance to the Council. . . . His reassignment represents a real loss to the cause of medical civil defense."

The good wishes of all Dr. Wilson's physician-friends in Washington go with him to his new assignment.

Dr. Thomas Henry Alphin, who has served with the health division of Federal Civil Defense Administration, is a new member of the **Washington Office of the AMA.** Dr. Alphin was formerly a member of the medical faculty of the University of Virginia and Assistant Chief Medical Examiner for the state of Virginia. He will share duties with Dr. Cyrus H

Maxwell as Assistant Director of the Washington office.

Dr. Wallace M. Yater was invited to speak at the Regional Meeting of the American College of Physicians at Old Point Comfort, Virginia, on February 26. The subject of his address was "The Future of Medicine."

Drs. Charles Stanley White, Laurence H. Kyle and Joseph S. Lawrence, of Washington, took part in the Northeastern Regional Meeting of the International College of Surgeons in Philadelphia, February 13 and 14. Dr. White, Emeritus Professor of Surgery, George Washington University School of Medicine, spoke on "Silent Lesions of the Abdomen." Dr. Kyle, who is Associate Professor of Medicine, Georgetown University School of Medicine, presented a paper on "ACTH and Cortisone in Surgery." Dr. Lawrence was guest speaker at the banquet, February 13. Dr. Lawrence was formerly Director of the Washington Office of the AMA.

Dr. Worth B. Daniels was one of four Johns Hopkins University alumni recently elected to the University's Board of Trustees; he will serve for three years. One of the other new trustees is Mr. D. Mead Johnson of the well-known pharmaceutical firm of Mead Johnson and Company, of Evansville, Indiana.

Dr. Daniels received his medical degree from Johns Hopkins University in 1924. Since 1932 he has been Clinical Professor of Medicine at Georgetown University School of Medicine.

Dr. Samuel M. Becker has been certified as a specialist in medical legal practice by the American Board of Legal Medicine, Inc., which was organized in New York City in 1951. Dr. Becker is a charter member of the organization.

Colonel Hugh R. Gilmore, Jr., MC, USA, formerly Chief of Pathology and the Allied Sciences Division of the Surgeon General's Office, has been appointed Curator of the Medical Museum of the Armed Forces Institute of Pathology.

Colonel Gilmore received his degree in medicine from the University of Pennsylvania in 1921. He has served in many capacities at medical installations both in the United States and overseas. During World War II he was Preventive Medicine Officer to various command headquarters in the North African and Italian Theater of Operations. He was Acting Curator of the Medical Museum for nine months during a two-year tour of duty at AFIP, from 1935 to 1937.

Major General George E. Armstrong, Surgeon General of the U. S. Army, addressed the Third Annual Postgraduate Symposium on the Heart, sponsored by the Indiana University School of Medicine, February 10. General Armstrong spoke on "Cardiology and the Military Service."

Major General Harry G. Armstrong, Surgeon General of the U. S. Air Force, took part in a panel discussion on "The Continuing Impact of the National Defense Program on Medical Education," February 9, at a meeting of the Council on Medical Education and Hospitals of the AMA. This meeting was held in conjunction with the 49th Annual Congress on Medical Education and Licensure at the Palmer House, Chicago, February 8, 9 and 10.

Dr. Wallace M. Yater, President of the District Medical Society, addressed the Public Health Committee of the Washington Board of Trade, February 5, at a luncheon meeting at the Burlington Hotel. Dr. J. Ross Veal, Chairman of the Committee, presided.

Dr. Alban W. Eger is resuming his practice of internal medicine at 1801 Eye Street, N.W., after spending two years in Munich, Germany, with the 98th General Hospital. Dr. Eger held the commission of Captain in the Medical Corps.

Drs. Garnet W. Ault, Robert S. Smith and Alejandro F. Castro have opened offices in their new building at 921 20th Street, N.W., to be known as the Proctology Clinic of Washington.

CORRESPONDENCE

Washington, D. C., January 13, 1953

To the President of the Medical Society
of the District of Columbia:

The leading editorial of the December issue of the Medical Annals discusses, over the signature of Dr. Earl H. Mitchell, the problems of alcoholism. There, on page 677, I find the following: "Dr. Yater was also aware that there were very few cases of alcoholism improved by psychotherapy, due either to a lack of understanding of the objectives of the treatment by the patient or to a lack of understanding of the patient by the therapist. In contrast, it seemed to him that Alcoholics Anonymous was doing much more to rehabilitate the patient." I presume that you have been quoted correctly.

This statement of a physician in your responsible position cannot be disregarded; the less so since it is a *medical* man's opinion about the failure of a *medical* specialty—psychiatry—in a field largely considered its domain. Our own experiences, backed by statistics of 1,455 cases, do not agree with your opinion. I would appreciate being advised about your scientific sources of information which enabled you to make such a positive statement about the comparative results of medical psychotherapy and Alcoholics Anonymous.

Needless to say that our own statistical material, which at present is being considered for publication in the American Medical Association's *Journal*, is available to you any time you wish to examine it.

Sincerely yours,
Leopold E. Wexberg, M.D.
Director, Alcoholic Rehabilitation Program, D. C. Health Department

cc: Daniel L. Seckinger, M.D.
Z. M. Lebensohn, M.D.
Earl H. Mitchell, M.D.

Washington, D. C., January 21, 1953

Dear Dr. Wexberg:

I can understand your indignation aroused by the quotation of some remarks made by me concerning the relative merits of the treatment of alcoholics by psychiatrists and by Alcoholics Anonymous, inasmuch as you are conducting a clinic for the treatment of alcoholics and have reportedly had good results. My criticism was directed to treatment by individual private psychiatrists. I have no scientific figures, but in a period of observation extending over 31 years and from discussion with many other practicing physicians, I am sure of my ground. We internists and general practitioners are the ones who deal with the alcoholics. Furthermore, it has been evident that many psychiatrists do not want to treat them.

I look forward with great interest to the report of your experience. It will make me happy to see a clinic conducted by physicians that is making a "dent" in this problem. I have been told that you have adopted some of the technics of Alcoholics Anonymous, and I wonder if that doesn't have something to do with your success. On the other hand, I cannot help wondering whether your clinic has been in existence long enough for a real evaluation at this time.

If you desire I shall be pleased to publish your letter and this one in the Annals.

Very sincerely yours,
Wallace M. Yater, M.D.

cc: Dr. Seckinger
Dr. Lebensohn
Dr. Mitchell

Washington, D. C., January 27, 1953

Dear Dr. Yater:

I wish to thank you for your reply to my letter regarding treatment of alcoholics. It clears up at least part of the matter. Let me tell you that similarities between the Alcoholics Anonymous program and our approach are rather coincidental. Of course our three years of experience may not yet be enough for a conclusive evaluation; however, do you know of any evaluation of success published by Alcoholics Anonymous?

I certainly would appreciate your publishing our letters in the Annals.

Very sincerely yours,
Leopold E. Wexberg, M.D.

cc: Dr. Seckinger
Dr. Lebensohn
Dr. Mitchell

Washington, D. C., February 9, 1953

To the Editor:

Reference is made to the item under "News and Personals," page 48, in the January issue of the Annals, concerning the Joint Commission on Accreditation of Hospitals.

Whereas, the announcement stated that the Joint Commission was taking over the responsibility for setting standards for the Nation's hospitals, I think it would be of interest to your constituents to know that two years ago by formal agreement with the American College of Surgeons the inspection and accreditation of mental hospitals in the United States and Canada was taken over by the American Psychiatric Association. There remain certain overlapping interests which will be discussed in a meeting between groups representing the Joint Commission and our Association which has been set for the month of March. These overlapping areas are the medical and surgical divisions of mental hospitals and the psychiatric units in general hospitals. There are certain other specialized types of institutions, such as tuberculosis hospitals and those representing other special interests, which may be at this time unclear as to the authority and source of their inspection and accrediting.

The American Psychiatric Association, under its Central Inspection Board, has an Inspection and Rating Service which at the present moment has a secretarial staff and two full-time physicians of long experience in mental hospital administration; to date it has inspected approximately between one-third and one-half of public mental hospitals in the United States and Canada. Dr. Ralph Chambers, former Superintendent of Taunton State Hospital in Massachusetts, is the Chief Inspector, assisted by Dr. Frederick McDaniel, formerly Captain, U. S. Navy Medical Corps, and more recently Assistant to the Commissioner of Mental Hospitals for the State of Virginia. The Inspection and Rating Service is housed with the Office of the Medical Director of the American Psychiatric Association at 1785 Massachusetts Avenue, N.W., Washington 6, D. C.

Very sincerely yours,
Daniel Blain, M.D.
Medical Director, American Psychiatric Association

BOOK REVIEWS

Principles of Intensive Psychotherapy. Frieda Fromm-Reichmann, M.D. Price $3.75. Pp. 246. Chicago: University of Chicago Press, 1950.

The book presents in a clear and comprehensive manner the principles of psychoanalytically oriented psychotherapy with psychoneurotics and psychotics evolved by Dr. Fromm-Reichmann's "training in and my experience with the application of Sigmund Freud's concepts of psychoanalytic psychotherapy with neurotics, the development of these teachings during the last fifty years, and especially H. S. Sullivan's operational, interpersonal conceptions."

The book is divided into 3 parts: (I) The Psychiatrist: Personal and Professional Requirements; (II) The Psychotherapeutic Process. The Patient and Therapist; (III) Adjuncts to Intensive Psychotherapy. A very helpful bibliography is found at the end of the book.

Psychotherapy is viewed by Dr. Fromm-Reichmann as "a mutual enterprise, if not a mutual adventure, between two people who are strangers and who are likely to be as different from each other as are the average personalities in this culture" (doctor-patient relationship). Emphasized is the necessity to view this relationship in its "transference" or "parataxic" facets, but also in its factual, actual aspects. Points of departure from Freud's original teachings are noted in regard to (1) transference doctrine, and (2) ubiquity of Oedipus complex. The psychiatrist's part in the doctor-patient relationship is discussed to clearly bring out the necessity "for a personal psychoanalysis as part of the training for doing intensive psychotherapy" as a participant observer in the therapeutic process. The reciprocal relationship of security and anxiety, empathic experience between doctor and patient, as well as the psychiatrist's attitude toward cultural and ethical values, are considered in relation to the goals of psychotherapy.

Throughout the book the author points out that the many developments in psychoanalytic insight and technic have made possible modifications of technic to meet the demands of the patient and psychiatrist in our times. The intensive psychotherapy of schizophrenics is to the point. Many of Dr. Fromm-Reichmann's clinical examples throughout the book are experiences with such patients. In the chapters on Interpretation and Its Application, the excerpts from these clinical experiences depict the psychotherapeutic process vividly and dynamically, showing that the classical methods of psychoanalysis can be effectively adapted to both psychoneurotics and psychotic patients.

The final section of the book, devoted to intercurrent events in the patient's and psychiatrist's lives, is a most interesting presentation of very practical problems which Dr. Fromm-Reichmann calls Adjuncts to Intensive Psychotherapy. Suicidal attempts, handling of relatives, marriage, etc., are considered from the patient-doctor relationship point of view. Again the actual as well as the distorted aspect of the psychotherapy process is pointed out.

Through this book Dr. Fromm-Reichmann fulfills the wish of many of her students who attended her lecture course at the Washington School of Psychiatry, the Washington-Baltimore Psychoanalytic Institute, and the William Alanson White Institute of Psychiatry in New York. Although the reviewer attended the lecture course during two previous school years, he has continued to find the book most helpful in work with his patients and families, and in assisting lay clinic staff members doing psychotherapy under the supervision of psychiatrists, and in teaching fourth year medical students. The book is an excellent guide to professional workers entrusted with facilitating the of life problems of others.

Anthony Zappala, M.D.

Ophthalmic Pathology; An Atlas and Textbook. Jonas S. Friedenwald, Helenor Campbell Wilder, A. Edward Maumenee, T. E. Sanders, John E. L. Keyes, Michael J. Hogan, W. C. and Ella U. Owens, with the editorial assistance of Helen Knight Steward. Published under the joint sponsorship of The American Academy of Ophthalmology and Otolaryngology and the Armed Forces Institute of Pathology. Price, $18.00. Pp. 489, with 1,160 plates. Philadelphia: Saunders, 1952.

The many workers responsible for the development of this valuable addition to the American Pathology references have much of which to be justifiably proud.

The text is deceptively simple in coördinating basic pathology with the specialized tissue reaction of the eye structures. The illustrations clarify, rather than confuse, the diseases presented. The scope of the material is quite broad, and the references are well selected.

The format is good. The type is quite legible. The paper is of good stock.

This is a reference which is of value to the medical library, the pathologist, and those interested in the manifestations of disease in the eye. This reviewer highly recommends this atlas to these groups.

Edward C. McGarry, M.D.

The Low Fat Diet Cookbook. Dorothy Myers Hildreth and Eugene A. Hildreth, M.D., with an Introduction by Francis C. Wood, M.D. Price, $2.95. Pp. 148. New York: Medical Research Press, 1952.

In an excellent introduction, Dr. Francis C. Wood, Professor of Medicine at the University of Pennsylvania, sets forth the purpose of Mrs. Hildreth's book of recipes. While atherosclerosis is not necessarily an inevitable concomitant of aging, he says, evidence is quite conclusive that eating fatty foods plays a part in its development. Dr. Wood points out that more evidence is needed regarding the relationship between low fat diet and circulatory diseases, but that many physicians are now suggesting to their older patients that they reduce their intake of fatty foods. In order to make such diets compatible with pleasurable dining, Mrs. Hildreth has compiled a book of recipes which in variety and palatability seem to fulfill their purpose adequately.

Mrs. Hildreth is a graduate in dietetics of Mary Washington College for Women of the University of Virginia. She was at one time assistant therapeutic dietician at Johns Hopkins Hospital; as a member of the research staff of the University of Pennsylvania Robinson Foundation, she worked on the anti-vitamin factor under Dr. Ralph Jones. At the writing of this book she was consultant dietician for the University of Pennsylvania Robinette Foundation, Heart Clinic, where she participated in research on the low fat diet in association with her husband. The extensive research the latter conducted in the application and use of the low fat diet was made possible by a grant from the USPHS. Dr. Hildreth is a graduate of Virginia Medical College and interned at Johns Hopkins Hospital.

Five chapters are devoted to recipes classified as follows: meat, fish and poultry; casserole and supper dishes; vegetables; salads and sandwiches; and desserts. Chapter One gives an outline of the basic low fat diet, the fat content of many foods both included and excluded from the diet, and shows how the diet can be adjusted to lose or gain weight. The second chapter, on planning menus, offers a week's menus to serve as a guide.

Mrs. Hildreth presents her material in a chatty style; she offers many helpful suggestions on diet and preparation of foods along with the recipes. It is a book which physicians can well recommend to patients for whom they prescribe a low fat diet.

A. L. E.

Symposium on Treatment of Trauma in the Armed Forces. Sponsored jointly by The Division of Medical Sciences of The National Research Council and The Army Medical Service Graduate School, Walter Reed Army Medical Center, March 10–12, 1952. Washington: Army Medical Service Graduate School, 1952.

There can be no argument with the adequacy of the title of this book, but it is unfortunate that the title does not attract the attention of those physicians not interested in surgery. It is an amazing collection of material of some interest to all physicians—and especially those responsible for local Civil Defense planning.

The surgical discussions include authoritative methods of handling wounds of the skull, chest, heart, abdomen and extremities.

Of wider appeal are the excellent and practical discussions on the relief of pain, anesthetic management, postoperative complications, and early ambulation. There are good sections on the detection and prevention of transfusion reactions, fluid and electrolyte problems and causalgia.

The book ought to be in all medical school and hospital libraries. Anyone who picks it up and leafs through it will find at least 2 or 3 chapters of interesting reading.

Nicholas J. Cotsonas, Jr., M.D.

Histopathological Technic including a Discussion of Botanical Microtechnic. Aram A. Krajian, Sc.D., formerly in the Department of Pathology, Los Angeles County General Hospital, Los Angeles, Calif., and R. B. H. Gradwohl, M.D., Pathologist to Christian Hospital; Director, Gradwohl School of Laboratory and X-Ray Technique, St. Louis, Mo. Price. $6.75. Pp. 362

with 131 text illustrations and 7 color plates. St. Louis: Mosby, 1952.

This revised edition of an old text has failed to meet the high requirements set forth by the authors. Although the arrangement of material follows a logical progression of events, there is excessive emphasis of the use of frozen section technic in the preparation of routine microscopic slides, at the expense of a thorough presentation of the standard paraffin and celloidin methods. The section on special staining fails to point out the pitfalls and usual sources of failure when these stains are employed. The sections on the care and use of microtome and on the use of the Technicon are well presented.

The lack of references limits the use of this book for the serious workers in this field. In my opinion this edition is useful only as a supplemental guide for those working in the field of histopathology.

EDWARD C. MCGARRY, M.D.

The Story of the Adaptation Syndrome (told in the form of Informal, Illustrated Lectures). HANS SELYE, M.D., PH.D. (Prague), D.Sc. (McGill), F.R.S. (Canada), Professor and Director of the Institut de Médecine et de Chirurgie expérimentales, Université de Montréal. Price, $4.50. Pp. 225, with illustrations. Montreal, Canada: Acta, Inc., 1952.

This book might well be referred to as "Everyman's Selye." It is a summary of his work on the adaptation syndrome presented in the form of ten coherent lectures. Because of its size the presentation of material is limited to the more important aspects of stress, leaving out much of the detail and discussion which are to be found in the author's monographs "Stress" and "Annual Reports on Stress." In view of this limitation and because of Dr. Selye's style of historical narration of the development of his ideas on the general adaptation syndrome, the book remains very personal and very readable.

The lectures were composed for general audiences, and not for those with a special interest in endocrinology; they are easy and enjoyable reading, and can be recommended to all physicians and students.

The format of the book, with its printing, column notations, and diagrams, is excellent.

PATRICK B. STOREY, M.D.

BOOKS RECEIVED

Acknowledgment is made of the following books which have recently been received. Selections will be made for more extensive review in the interests of our readers and as space permits. Physicians are urged to submit reviews of additonal current books which, in their opinion, merit comment.

Directory of the American College of Chest Physicians, 1952. Pp. 599. Chicago, Ill.: Executive Offices, 112 East Chestnut Street.

Endocrine Treatment in General Practice. Edited by MAX A. GOLDZIEHER, M.D., AND JOSEPH W. GOLDZIEHER, M.D. Price, $8.00. Pp. 474. New York: Springer, 1953.

Annotated Bibliography of Vitamin E, Volume II, 1950 and 1951. Compiled by PHILIP L. HARRIS AND WILMA F. KUJAWSKI of the Research Laboratories of Distillation Products Industries (Division of Eastman Kodak Company), Rochester 3, N. Y. Price, $2.00. Pp. 106. New York: (Distributed by) The National Vitamin Foundation, Inc., 150 Broadway, New York 7, N. Y.

Hospital Staff Appointments of Physicians in New York City. Compiled by the Hospital Council of Greater New York. Price, $3.25. Pp. 151. New York: Macmillan, 1951.

A Doctor's Soliloquy. JOSEPH HAYYIM KRIMSKY. Price, $2.75. Pp. 116. New York: Philosophical Library, 1953.

A Century of Medicine 1848–1948. The History of The Medical Society of the State of Pennsylvania. Edited by HOWARD KISTLER PETRY, M.D. Price, $5.00. Pp. 404. Illustrated. Harrisburg, Pa.: The Medical Society of the State of Pennsylvania, 1952.

Poliomyelitis: Papers and Discussions Presented at the Second International Poliomyelitis Conference. Compiled and edited for the International Poliomyelitis Congress. Pp. 555. Illustrated. Philadelphia: Lippincott, 1952.

Second Annual Report on Stress. HANS SELYE, M.D., PH.D. (Prague), D.Sc. (McGill), F.R.S. (Canada), Professor and Director of the Institut de Médecine et de Chirurgie expérimentales, Université de Montréal, AND ALEXANDER HORAVA, M.D. (Lausanne), Research Associate and Librarian of the Institut de Médecine et de Chirurgie expérimentales, Université de Montréal. Price, $10.00. Pp. 526. Illustrated. Montreal, Canada: Acta, Inc., 1952.

Operating Room Technic, St. Mary's Hospital, Rochester, Minn., 4th ed. Price, $6.50. Pp. 345, with 219 figures. Philadelphia: Saunders, 1952.

Rheumatic Diseases—Diagnosis and Treatment. EUGENE F. TRAUT, M.D., F.A.C.P., Associate (Rush)

Clinical Professor of Medicine, University of Illinois; Attending Physician to the Cook County Hospital and to the West Suburban Hospital, Oak Park, Illinois; Associate Attending Physician to the Presbyterian Hospital of Chicago; Director of the Arthritis Clinic of Cook County Hospital; Lecturer on Arthritis in the Cook County Graduate School of Medicine; member of the American Rheumatism Association. Price, $20.00. Pp. 942, with 192 illustrations. St. Louis: Mosby, 1952.

The Literature on Streptomycin 1944–1952. SELMAN A. WAKSMAN. Price, $5.00. Pp. 553. New Brunswick, N. J.: Rutgers University Press, 1952.

NORMAN PHILIP SCALA, A.B., M.D., LL.B.
(1892–1953)

Dr. Norman P. Scala, well known ophthalmologist, died unexpectedly, January 20, 1953, at his home in Washington, 918 South Carolina Avenue, S.E. He had attained considerable prominence as a concert pianist and teacher of music before he embarked upon a career in medicine.

Dr. Scala was born in Washington, D. C., January 21, 1892; he was the son of the first leader of the Marine Corps Band, Captain Francis M. Scala, and Olivia Arth Scala.

Dr. Scala became a concert pianist while a student at the Washington College of Music. In 1910 he was a music teacher at the Hall Noyes' School and in the public schools of Washington. By 1916 he had become a chemist with the National Canning Association. Returning to his music, he was oboist and first piano soloist with the Marine Band from 1917 to 1919.

During these early years he also studied at George Washington University, receiving his A.B. degree in 1916 and his degree from the School of Medicine in 1920. Four years later, he received the degree of Bachelor of Laws from Georgetown University. Postgraduate study was pursued at Harvard University in 1922 and at New York Polyclinic in 1925; throughout the 1920's he supplemented his education with study abroad at the University of Vienna, where he was an intern in the eye clinic, 1929–30. He also went abroad in 1936 to study at the University of Grätz (Poland).

Dr. Scala interned at Gallinger Municipal Hospital, 1918 to 1919, and was resident physician at Children's Hospital in 1920. He was employed as surgeon with the U. S. Public Health Service for three years, 1920–23, and during the same years conducted a private practice as a general practitioner. The next two years he devoted to neuropsychiatry; from 1925 to 1934, to ophthalmology and otolaryngology, limiting himself to ophthalmology after 1934. He was Instructor in Ophthalmology at Georgetown University from 1932 to 1936.

As ophthalmologist he was on the courtesy staffs at various times of Emergency, Providence and Doctors hospitals.

In 1921 Dr. Scala became an Active member of the Medical Society of the District of Columbia and continued his membership until he died. He was also a member of the American Medical Association, the Association for Research in Ophthalmology, Washington Ophthalmological Society, Pan American Medical Society, International Medical Club, and a number of fraternal societies.

He was co-author with Dr. E. A. Spiegel (Philadelphia) of numerous articles in the field of neurology of the eye, ear, nose and throat. He composed several musical compositions.

Surviving are three brothers, Chester A. Scala, Suitland, Md.; William B. Scala, Capitol Heights, Md.; and Francis Scala, of Washington. He also leaves two sisters, Mrs. Gertrude Keyser, 808 F Street, N.E., and Miss Estelle M. Scala, of the South Carolina address. His wife, Emily Kolb Scala, died in 1934.

LUTHER ALLEN GILLIOM, M.D.
(1916–1953)

Dr. Luther A. Gilliom, one of Washington's younger anesthesiologists, a veteran of World War II, died, January 24, 1953, at Garfield Memorial Hospital. He resided at 5327 Allandale Road, Green Acres, Md.

Dr. Gilliom was born in Danville, Illinois, June 13, 1916, the son of Arthur L. and Nancy B. Gilliom. His father, an attorney, later practiced law in Indianapolis and was Attorney General of Indiana from 1924 to 1928. Dr. Gilliom graduated in medicine from Marquette University in 1942, and the following year combined his internship with a residency in anesthesia at Indianapolis City Hospital. He was staff anesthesiologist at Methodist Hospital, Indianapolis, from May 1943 until July 1943, when he entered active duty in the Army.

Dr. Gilliom was commissioned Captain in the Army Medical Corps during World War II, serving in the Burma sector. Upon returning to the United States, he continued training in anesthesiology at Fort Benjamin Harrison, Indianapolis. Transferred to Walter Reed Army Hospital in 1944, Dr. Gilliom served in the section on anesthesia and was chief of the section from 1945 to 1946.

Entering private practice in Washington in 1946, Dr. Gilliom was anesthetist at Garfield, Episcopal Eye, Ear and Nose, and Children's hospitals.

He was a member of the American Society of Anesthesiologists, the American Medical Association, an Active member of the Medical Society of the District of Columbia since 1946, and a member of the Medical Arts Society of the District of Columbia.

Surviving him, in addition to his parents mentioned above, are his wife, Mrs. Mary Jane Gilliom; a small son, Robert A. Gilliom; and three brothers, Albert, Arthur and Richard Gilliom, all of Indianapolis.

DANIEL P. BUSH, M.D.

(1869–1952)

Word has recently been received of the death of Dr. Daniel P. Bush on November 18, 1952. Dr. Bush, an Associate member of the District Medical Society, last resided at River Haven, Manatu Station, East Bradenton, Florida.

Dr. Bush was born in Geneseo, Illinois, July 26, 1869, the son of Jacob and Charlotte Bush. He received his early education in Lincoln, Nebraska. He came to Washington to study at George Washington University School of Medicine and received his degree in medicine in 1905. He began practicing in the District of Columbia the same year.

Dr. Bush was Medical Director of the U. S. Government Printing Office from 1906 to 1938. In 1938 he was a member of the U. S. Departmental Safety Council. At one time he had been a member of the D. C. Board of Trade.

He was elected to Active membership in the Medical Society of the District of Columbia in 1912, transferring to Associate in 1938. He was a member of the George Washington University Medical Society, and a member of the National Lodge, F.A.A.M. While in Washington he belonged to the Columbia Country Club.

He is survived by his wife, Mrs. D. P. Bush, who remains at their home in Florida.

Acute Hypotension—Finnerty, Witkin and Fazekas

(*Continued from page 116*)

subjects with malignant hypertension evidence of cerebral insufficiency may be noted when a normal mean femoral arterial pressure is attained.

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Dimethylane for Dysmenorrhea—Vivino and Ritter

(*Continued from page 118*)

mary dysmenorrhea, were treated with a new dioxolane, Dimethylane.

2. A favorable response was noted in all patients treated, whether the Dimethylane therapy was initiated prior to the onset of menses or at the onset of menses.

3. No toxic effects from the use of the drug were noted.

4. The mode of action of Dimethylane on dysmenorrhea may be a combination of its muscle-relaxing properties and its tranquilizing effect.

Addendum: Since this study was completed, a patient treated with Dimethylane developed a mild allergic dermatitis (mild macular rash and pruritus) 24 hours after ingestion of the drug; this patient responded rapidly to the use of antihistaminics.

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Acute Cholecystitis—Horwitz, McCorkle and Alpert

(*Continued from page 132*)

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Tuberculosis Survey—Frohman

(*Continued from page 134*)

it was usually too late for any procedure. As recently as 1940, this sort of patient was seen daily. He did not think laboratory procedures were worth the outlay in either time or money. What a relief it is that this obstacle of ignorance is fast disappearing!

With his way being prepared for him by the publicity drives of preventive medicine groups, the general practitioner can now do more to detect unsuspected disease than can any other individual or organization. As has already been stated, he sees 85 per cent of the patients seen in this country. He is, therefore, morally obligated to become thoroughly familiar with all feasible diagnostic procedures and equipment, to employ such procedures and equipment himself if possible, and, if not, to refer his patients to someone who can. Herein lies the future of successful preventive medicine.

Progress of Blue Shield Plan—Stubbs

(*Continued from page 150*)

pect to review the office care program and the Schedule of Fees to consider any advisable adjustments.

Our greatest concern, however, will be to merit the continued confidence of the public and the medical profession whom we serve. In the primary stage of the Plan's growth, problems which came to light were often accelerated by the unusual growth of the Plan. A number of decisions were, of necessity, made quickly and boldly by the Board of Trustees in order to meet situations before conditions became uncontrollable. In the past few months Medical Service has become much more stable, and I am sure that the Board of Trustees is looking forward to a period during which further development of the Plan may be undertaken with greater deliberation and consultation among the interested groups.

Membership

(*Continued from page 152*)

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SUBDURAL EFFUSIONS IN INFANCY* †

HAROLD STEVENS, Ph.D., M.D.

Associate Professor of Neurology, Georgetown University School of Medicine

JONATHAN M. WILLIAMS, M.D., F.A.C.S.

Associate in Neurological Surgery, George Washington University School of Medicine

ANTIBIOTIC therapy in infectious diseases has not only altered the statistics of mortality and morbidity but has implemented the emergence of new sequential patterns of disease. In some instances the consequences of the primary acute and previously fatal illness constitute a clinical entity, described in the older literature but rarely encountered in the past, since so few patients recovered. In other instances, the clinical aftermath of an acute disease, truncated by antibiotics, represents a new disease complex. In either event there is an increasing occurrence of these survival syndromes. This tends to displace emphasis from the relatively simplified therapeutic programs for the acute infection to the less explored sphere of morbidity patterns residuary in the recovered patient. Clinicians are now compelled to focus on the probabilities of new complications and new sequelae of previously lethal diseases. New measures for rehabilitation may have to be designed.

An example of such a clinical problem is subdural effusion in childhood, an old but poorly comprehended syndrome. The many surviving beneficiaries of antibiotic therapy now present frequent opportunity to observe this symptom-complex. Briefly, it consists of a now recognized clinical concatenation, beginning usually with meningitis in an infant aged 1 year or less. With appropriate antibiotic therapy a "cure" is effected but the infant remains or becomes listless, pale, anorexic and irritable. The meningitic process is often blamed, and the conclusion is drawn that irreparable brain damage has accrued from the acute illness and accounts for the whole process. Localizing signs are usually absent. Occasionally the fontanel is tense or bulging, but this latter sign has been given undeserved emphasis and from our observations is frequently lacking, even in the face of massive subdural collections of fluid. Convulsions, focal paralysis and stupor may also occur.

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* From the Neurological and Neurosurgical Services, Children's Hospital, Washington, D. C.

† Read before the Philadelphia Pediatric Society in Philadelphia, April 14, 1953.

Our observations on 30 cases* of nontraumatic subdural effusion justify the inference that this is a common lesion, that its diagnosis can be effected promptly and safely, and that corrective measures may be necessary to prevent neurologic consequences and to salvage the child's mentality.[1] If the diagnosis is suspected, bilateral subdural taps should be made, at the extreme lateral margin of the anterior fontanel or through the coronal suture about midway between the extreme corner of the fontanel and the zygoma. If more than 2 c.c. of fluid is found, subdural effusion may be said to be present.[2,3] The needle should not be advanced more than 3 to 4 mm. Contrary to the admonitions of Ingraham and Matson[4] to remove only 15 c.c. each time, we usually remove all the fluid obtainable, as also reported by others.[5] The fluid may be limpid and blood-tinged or xanthochromic (figure 1). The protein levels ranged from 15 to over 2,000 mg. per cent in our series, and the concentration tended to rise with each succeeding sample; however, this was not a constant phenomenon. Bacterial cultures were negative.

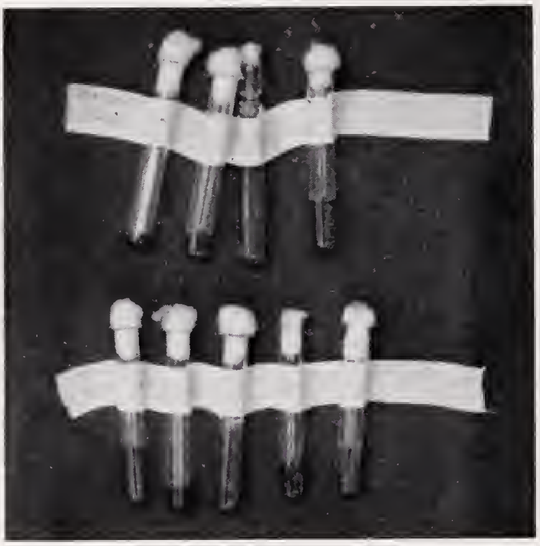

FIG. 1. Representative group of tubes showing results of bilateral subdural taps in an infant at 2-day intervals. Volumes vary from 5 to 30 c.c.

The volume obtained with each subdural drainage varies, and in some cases the subdural space eventually "dries up." As reported by others,[6,7] the collection of fluid may originally have been confined to one side, but it eventually appeared on the opposite side, indicating the necessity for bilateral taps in all cases.

Can the subdural effusion be completely eliminated and all symptoms resolved without sequelae by repeated subdural taps? More data and careful statistical evaluation of this problem are necessary before this critical question can be answered. Our impression at present is that even if the effusion is "dried up" by repetitive drainage of the subdural space, the fluid may reaccumulate and a vascularized thickened neomembrane still remain to encapsulate the brain and strangle its growth. The following is a case history illustrating that subdural taps through the fontanel do not necessarily constitute definitive treatment.

D. D., a 5½-months-old white male had developed normally and been in good health until 2 days prior to admission to Children's Hospital, when he developed fever and irritability. Spinal fluid examination revealed 1860 white blood cells with 96 per cent polymorphonuclears. Smears showed *N. meningococcus* and culture grew out *H. influenzae,* type B. Treatment was begun with penicillin, sulfadiazine, and later chloramphenicol. The course of the illness was stormy and punctuated by frequent convulsions and diarrhea. The first subdural taps were done 3 weeks after admission because of the child's failure to show clinical improvement following adequate chemotherapy. Ten c.c. of clear fluid was recovered from each side. At 2-day intervals fontanel taps were repeated. The volume recovered from the right side rose to 15 c.c. but on the left diminished to nothing. Three weeks after the first subdural puncture both sides had "dried up." Three days later a right frontal craniotomy was performed which revealed a well developed and organized neomembrane closely applied to the cortex. There was no fluid in the subdural space. The following week a craniotomy on the left demonstrated a similar but thinner membrane. Eight months following excision of the membranes the child's development was normal and there had been no convulsions.

Ingraham and Matson,[4] in their classical account of traumatic subdural hematoma, emphasized the dynamics of infant brain growth involved in such a condition. In contrast to the static size and position of the adult brain and calvarium the infant's brain size approximately doubles in the first 3 months and doubles again in the next 6 months. Whereas in adult subdural hematoma simple evacuation of the clot may suffice, in infancy the thickened subdural membranes do not stretch or yield with the expanding growing brain but confine it to the limited area of this constricting envelope. Blood supply and spinal fluid dynamics are further embarrassed, and cerebral atrophy results. Once such a membrane has formed, it seems reasonable that surgical excision is indicated.

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* Eight cases have been observed by us at the Gallinger Municipal Hospital.

The excised membrane shown in figure 2 is typical in our experience. Characteristically these membranes are bilateral and thickest at their frontal pole and extend back invariably to the level of the sphenoidal ridge and at times further back than that. However, as it extends back the membrane becomes attenuated, disappearing in the region of the Rolandic fissure. We have not as yet observed the membrane in these cases in the parietal or occipital regions. Since this membrane is a tough, inelastic, well-vascularized structure, it might be responsible for 2 consequences which would make its removal desirable. First, the constrictive effects of the membrane could prevent growth of the brain, particularly the frontal lobes, and, second, the possibility exists that blood vessels might penetrate the arachnoid and pia, entering the cortex and forming a meningocortical cicatrix. This would serve as a focus potentially productive of convulsions. In this connection electro-encephalographic tracings were done, pre- and post-operatively, and will be described in another communication.[8] Our current impression, in agreement with that of Kinley[9] and of Elvidge,[7] is that in general the EEG abnormalities are minimal and non-localizing. However, in untreated patients conspicuous dysrhythmia is manifest (figure 3). These abnormalities could have resulted from the meningitic process per

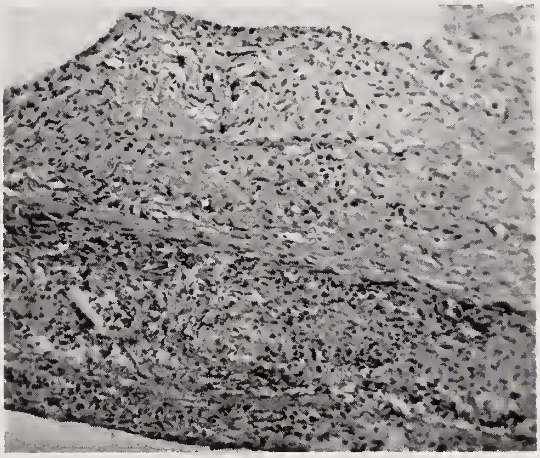

FIG. 2. Typical neomembrane removed in a case of postmeningitic subdural effusion. Mature fibrocytes, collaginous fibrous tissue, new blood vessel formation, and minimal or absent inflammatory reaction may be seen (H. and E. 200 ×).

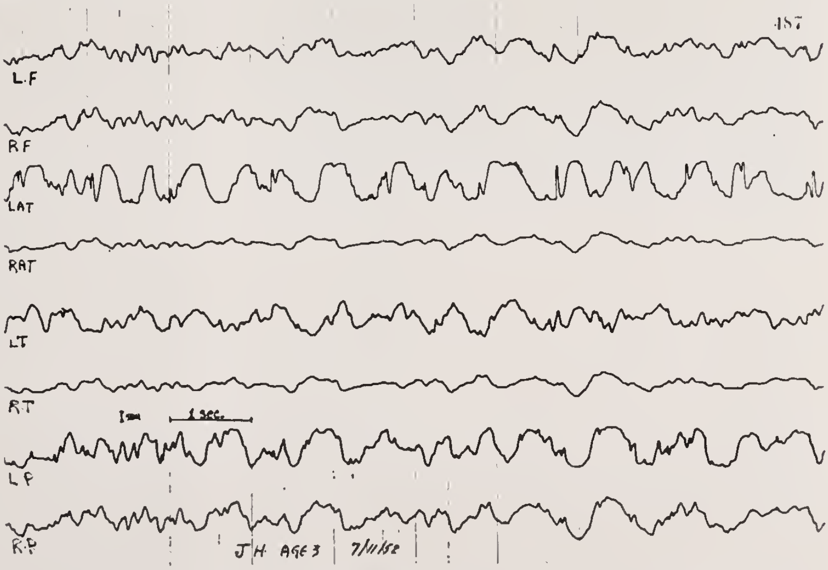

FIG. 3. EEG in a case of postmeningitic subdural effusion in which bilateral nature of lesion was unsuspected. Surgical removal of membrane was done on right side only. Eighteen months later retardation is present and a left anterior temporal focus is evident.

se. We have also done EEG tracings before, after and during subdural taps, with no convincing evidence that EEG activity is significantly altered. Further work is in progress.

Do similar subdural effusions occur in older children whose closed fontanel prevents ready accessibility to the subdural space? Margaret Smith[5] comments, "It is not known how often subdural fluid might be found in older patients."

The following case illustrates this problem in a 2½-year-old child in whom the fontanel, of course, was closed:

B. S., a previously healthy, normal boy, was admitted to the hospital with a history of vomiting and stiff neck of 1 day's duration. Spinal fluid contained 11,700 white blood cells, 98 per cent polymorphonuclears, 190 mg. per cent protein, and less than 5 mg. per cent sugar. Treatment was begun with intravenous chloramphenicol and aureomycin. After 6 days the spinal fluid had cleared appreciably and the temperature hovered near normal, but the child remained irritable and listless. He would no longer sit. One observer believed him to be deaf. A second course of chloramphenicol and aureomycin was given. The temperature became normal and the cell count in the spinal fluid dropped to 25 with 12 per cent polymorphonuclears. Repeated cultures never grew out an organism. The child's behavior showed severe regression and he would not hold up his head and could only partially turn over. Sitting or standing was impossible. Tremors and involuntary movements were noted. The cry became a thin, high-pitched whine. The child ate poorly and slept at long intervals. Because this behavior was typical of those other children in whom a subdural effusion had been found on fontanel tap, its presence was postulated. Since the fontanel was closed, exploratory trephines were performed. Bilateral subdural effusions were found with well developed membrane formation which was removed by 2 separate craniotomies a week apart.[10] The surgery was performed on the twenty-sixth hospital day. Three days after the first craniotomy the child could sit up and feed himself. He was alert and interested in his surroundings. Following the second craniotomy the child walked about the ward and played with other children. Six weeks following operation the mother considered the child normal, and examination showed no evidence of retardation or deficit.

Only a few observations have been reported in recent literature on subdural effusion,[5,6,11,12] but all have noted the presence of meningitis as a precursor of this complication.* It has also been noted, as in our cases (table 1), that *Diplococcus pneumoniae* and *Haemophilus influenzae* are the organisms most likely to produce subdural effusions.

TABLE 1

Acute Illnesses Preceding Subdural Effusion

	NO. OF CASES
Meningitis	
H. influenzae (Type B)	8
D. pneumoniae	4
Mixed above organisms	1
Meningococci	3
Undetermined	3
Respiratory Illness	5
Diarrhea	5
Nonspecific athrepsia	1

An unexplored facet of this problem concerns those cases in which subdural effusion occurs not in association with meningitis but in association with athrepsia, as in chronic diarrhea, severe infections, etc. These patients usually show more or less dehydration and inanition. The next case typifies this group.

C. M. was 6 months old when she was admitted to the Children's Hospital. Her past history indicated that she was admitted first on December 1, 1951, with anorexia, tachypnea and fever of 3 days' duration. The fontanel was full. Numerous moist and crackling rales were found in the chest, and the diagnosis of bronchiolitis was made. Convulsions began on the day of admission; the patient became cyanotic and developed irregular respiration. She was immediately placed on chloramphenicol and penicillin therapy and on the third day was slightly improved. However, on the fourth day she was observed to be lethargic. On the ninth day subdural taps revealed 2 c.c. of xanthochromic fluid on the right side, and over the next several days xanthochromic fluid was recovered from both sides. The subdural space "dried up," and she was discharged. At home the child refused to eat, cried all night, and was readmitted with a temperature of 103°F. On examination she appeared poorly nourished, mentally retarded, and acutely ill. The following day subdural taps recovered 12 c.c. of xanthochromic fluid on the right side and 3 c.c. on the left.

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* E. C. Rice and S. Ross, Directors of the Meningitis Service of Children's Hospital, Washington, D. C., place the frequency at about 40 per cent.

Repeated taps were continued until 20 to 35 c.c. was removed from each side. The fever remained elevated, and pediatric consultation gave assurance that the cause of the continued fever was not pulmonary. Repeated subdural taps still yielded xanthochromic fluid which consistently had high protein and normal sugar contents and was sterile on numerous cultures. A right frontal craniotomy was done which exposed a mature, thickened neomembrane enveloping the brain from the frontal pole back, including the temporal tip but diminishing and disappearing at about the coronal zenith. This was removed and there was a prompt drop in the temperature. Nine days later a similar craniotomy was performed on the left with identical results. The child made an uneventful recovery and was discharged 12 days later. She was most recently examined at 18 months of age. There has been no return of fever or other "acute" illness. The child still appears retarded but is gaining slowly. She has occasional seizures.

The hospital course and surgical findings in these latter athreptic cases were identical with the post-meningitic cases, and also were similar to post-traumatic cases. This was reminiscent of the many pathetic children seen in the outpatient clinic suffering from mental retardation or epilepsy, whose mothers have repeatedly insisted that "The baby was perfectly well until she had a severe attack of diarrhea when she was 3 or 4 months of age." It is possible that we have inadvertently stumbled upon yet another explanation for some cases of so-called idiopathic epilepsy, and perhaps for some cases of mental retardation. Other authors,[13, 14, 15] have pointed out the coëxistence of inanition and dehydration in children with subdural effusions, but cause and effect relationships have not been emphasized. In fact, some[7] believe that the subdural effusion with the associated loss of protein into the subdural space is the cause of the poor nutritional state.

What is the mechanism of subdural effusions? No satisfactory answer can be given at present, nor do we propose to offer a unitary explanation that would fulfill all requirements for an acceptable theory to account for this phenomenon. However, our experience leads us to believe that the genesis and evolution of subdural effusion are similar regardless of the original initiating cause, whether it is trauma, meningitis, or cachexia, and when, for any reason, fluid forms and stagnates in the subdural space a vascularized neomembrane develops. Perhaps the ancient designation, pachymeningitis hemorrhagica interna, implying an infectious etiology, should be resurrected. This would justify the old and discredited argument of Heschl in 1855 and Vierchow in 1857 that the fluid collections reflected inflammatory changes in the dura. Various authors[13, 16-19] have contributed to this polemic.

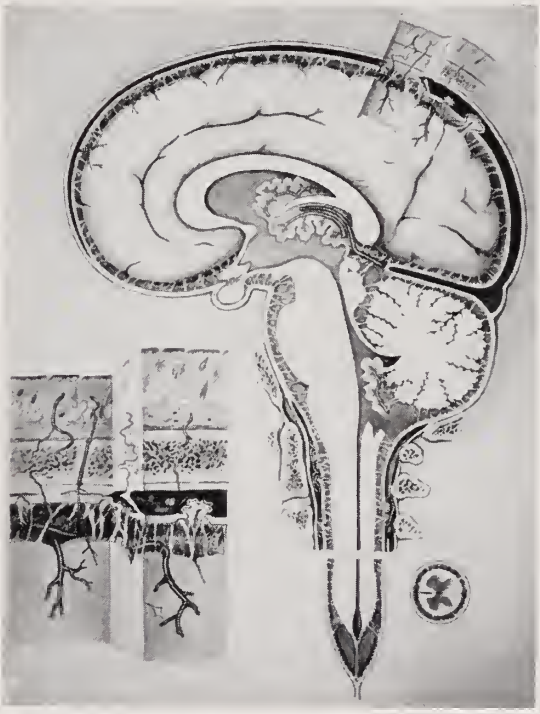

FIG. 4. Diagram showing subdural spaces and relative position of bridging cortical veins (courtesy of Professor O. Solnitzky).

It is possible that the one stimulus that actuates this process is any lesion or force that places traction on the bridging veins that cross the subdural space to empty into the venous sinuses. These bridging veins are unsupported as they traverse the subdural space and are thus vulnerable to any trauma, especially in the soft, more compressible infant's brain (figure 4). Three analogous situations may be cited which demonstrate the possible role of these veins in the subdural fluid collection:

1. Subdural bleeding due to trauma usually results from an anterior or posterior blow, thrusting the brain in the sagittal plane, tearing these veins by shearing force and producing a subdural hematoma. This commonly eventuates in a progressive separation of dura and brain, perhaps by placing further traction on the bridging veins, with more bleeding.[20] Typically, a neomembrane also forms, and surgery is usually required to prevent death or disability.

2. The same effect may be produced by less sudden but sustained downward pressure on the yielding brain, overstretching and tearing these same veins, e.g., as described in the phenomenon reported by Smith and Crothers,[21] who demonstrated the production of subdural fluid by air inadvertently entering the cerebral subdural space during pneumoencephalography. In this instance also the brain falls away from the dura because of interposed air, and the bridging veins may tear, forming, in effect, a subdural hematoma. It is noteworthy that this complication of pneumoencephalography seems more likely to occur in children less than 2 years of age.

3. Further evidence for this mechanism is offered in the fairly frequent occurrence of subdural hematoma following surgical measures for hydrocephalus, as described by Anderson.[22] When cerebrospinal fluid pressure is reduced in hydrocephalic infants, the force that keeps the thinned-out cortex pressed proximal to the dura is withdrawn, and the brain falls away, exerting traction on the bridging veins and causing subdural bleeding.

Thus, various forces applied in different directions may effect the same final common end, i.e., expansion of the potential subdural space, stretching and tearing the veins across this area; bleeding occurs and the fluid mass accumulates. Secondarily, this fluid compartment may expand further by inward osmotic seepage through the new semipermeable membrane.[23] In addition, this expanding mass may compress the remaining intact veins, obstructing the little absorption that might take place from this loculated fluid. Further, the forceful separation of the brain and dura may produce arachnoid tears,[24] permitting spinal fluid to contribute further to the volume of the subdural sac. In such an event oxygen, placed in subdural fluid collection, is promptly recovered from the ventricles, thus demonstrating a communication of the cerebrospinal fluid pathways with the subdural space. Arachnoidal tears might account for the low protein concentration sometimes found in large subdural effusions.

Meningitis, which involves all 3 layers, produces an exudate which may initiate the separation of brain and dura and initiate the train of events described above.

An overlooked possibility is that superadded iatrogenic factors may influence this process; e.g., the multiple subdural taps might actually produce further bleeding by puncturing cortical veins or by rupturing the highly vascular sinuses so frequently found in subdural membranes. Also, the multiple diagnostic spinal taps might sufficiently reduce intracranial pressure that migration of exudate or transudate into the fluid sac would be encouraged by the pressure differential thus created. The 5 or 10 c.c. taken from an infant is a greater proportion of his total spinal fluid volume than in an adult. Thus, the sag produced on the infant's brain by this withdrawal might be greater and tend to increase the size of the potential subdural space. Also, in the child returned to his crib in a supine position after the tap this effect would be most notable in the frontal region, due to gravity. This could explain the greater thickening and fluid accumulation in this zone.

But how is the effusion accounted for in diarrhea? One plausible explanation would implicate dehydration as a responsible factor which could reduce brain volume sufficiently to pull the brain away from the meninges and thus start the same sequence. Venous thrombosis may play a role.

SUMMARY

New neurologic problems are emerging in the form of survival syndromes. An example of such

(*Continued on page 220*)

THE EFFECTS OF ORAL ADMINISTRATION OF PENTYLENETETRAZOL AND BARBITURATE COMBINATIONS

THEODORE KOPPANYI, Ph.D.

Professor of Pharmacology and Materia Medica, Georgetown University School of Medicine

JOSEPH F. FAZEKAS, M.D.

Chief of Staff, Gallinger Municipal Hospital, Washington

THE increasing use of barbiturates as a cause of intentional or accidental suicide is of great concern, especially to the medical profession.[1-6] Approximately 3 billion doses of the barbiturates are being used annually in the United States, and of every 2,000 hospital admissions 1 is for barbiturate intoxication.[7] Because of our close contacts with fatal and near-fatal poisonings from barbiturates, we have studied the problem in an effort to find a combination of therapeutic agents which would offer some degree of protection against barbiturate overdosage. This preliminary report of our observations deals with the oral administration of fixed proportions of pentylenetetrazol and various barbiturates.*

Dogs were given anesthetic and fatal doses of pentobarbital sodium and of phenobarbital sodium by mouth, and the magnitude and the duration of effects were recorded. The acute oral toxicity of pentylenetetrazol was determined on dogs. Using combinations of 3 parts of pentylenetetrazol with 1 part of pentobarbital sodium, and 3 parts of pentylenetetrazol with 2 parts of phenobarbital sodium, it was found that the oral administration of doses corresponding to the anesthetic dose of the barbiturate alone produced depression and ataxia in the majority of animals, but only in 1 case was surgical anesthesia observed. When supra-anesthetic or fatal doses of the barbiturates were administered orally in this combination, prolongation of life and, in a number of cases, life-saving effects were clearly demonstrated.

In studying the chronic effects of these combinations in rats following daily intragastric administration, Sloane and Latven[8] administered pentylenetetrazol alone at a dosage level 18 times the average human dose level. Combinations of 3 parts of pentylenetetrazol with 1 part of pentobarbital sodium or secobarbital sodium or of 2 parts of phenobarbital sodium were administered to separate groups at a level of barbiturate dosage from 20 to 40 times the average human hypnotic dose. No untoward or deleterious effects could be detected following gross examination or histologic study of the tissues of these rats following daily administration for 90 days.

For humans, the minimum effective oral dose of pentylenetetrazol (characterized by subjective vertigo, nervousness, occasional olfactory hallucinations, and nausea) was found to lie between 500 and 1,000 mg. (total dose), or 7 to 15 mg. per Kg. of body weight. The average oral convulsant dose was approximately 45 mg. per Kg. The oral administration of the combination of 45 mg. per Kg. of pentylenetetrazol with 15 mg. per Kg. of pentobarbital sodium produced sleep from which the subjects could be easily aroused, and they walked with little or no ataxia. Convulsions were not produced. Over 200 subjects have now been studied with therapeutic hypnotic doses of these combinations in the following proportions: 100 mg. pentobarbital sodium and 300 mg. pentylenetetrazol; 100 mg. secobarbital sodium and 300 mg. pentylenetetrazol; and 100 mg. phenobarbital sodium and 150 mg. pentylenetetrazol. The sleep pattern following ingestion of these combinations differed in no way from the sleep pattern of the same subjects receiving the same amounts of these barbiturates alone.

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* The authors are grateful to James C. Munch, Medical Director, Strong Cobb & Company, Inc., Cleveland, Ohio, for making these tetrobarb combinations (tetropentobarb, tetrosecobarb, and tetrophenobarb) available to them for study.

These combinations were administered as hypnotics over a period of 3 months without producing disturbances of sleep or other untoward effects. Kleh[9] has administered these combinations daily over periods of 90 days to 4 groups of 15 subjects each in an independent investigation. He reports that the sleep pattern following the ingestion of the combinations differed in no way from that of the same subjects receiving the same amounts of the barbiturates without pentylenetetrazol, and that no untoward side-effects developed.

At the therapeutic dosage level of our combinations, pentylenetetrazol is a non-toxic, central nervous system stimulant by oral administration. Chesrow et al[10] administered 100 to 400 mg. of pentylenetetrazol 4 times daily to a series of 32 bed-ridden aged patients for a minimum of 90 days without producing any untoward side-effects. Fong[11] also observed no side-effects following administration of about the same doses to his aged patients. Kleh[9] observed no untoward effects following oral administration of 100 to 300 mg. of pentylenetetrazol daily to a group of patients over a period of 90 days.

These observations indicate that the addition of specified doses of pentylenetetrazol in combination with barbiturates significantly interferes with the toxic effects of the latter compounds, and, conversely, no untoward effects of pentylenetetrazol become manifest when administered in appropriate combinations with barbiturates. Pentylenetetrazol, however, did not interfere with the intended therapeutic effects of small doses of barbiturates.

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HYPOKALIEMIA IN PORPHYRIA

CHARLES W. THOMPSON, M.D.
ALVIN E. PARRISH, M.D.

Clinical Instructors in Medicine, George Washington University School of Medicine

THREE cases of porphyria have been observed. Electrolyte disturbance in the first case drew attention to low levels of serum potassium, and this abnormality was sought for in the succeeding cases. Since hypokaliemia has not been previously reported in porphyria it was felt that this observation warranted reporting even though its explanation is not known.

TABLE 1

	SERUM				mEq/24 H. URINE		
	Na*	K*	Cl*	CO₂*	Na	K	Reaction
A. H.	138	2.6	97	23.7	8	20	Acid
K. P.	135	3.5	99.8	18.2	90	44	Alkaline (pH = 9)
E. A.	140	3.0	100		174	24	Acid (pH = 6.1)

*mEq/L.
Normal range Na 132–145 mEq/L.
K 4.1–5.6 mEq/L.

Report of Cases

Case 1.—A. H., a 45-year-old housewife, was admitted to the hospital with a history of severe constipation of 10 days' duration and painful hemorrhoids. She was in marked emotional distress and became progressively more disoriented and confused during her hospital stay. Physical examination on admission revealed a blood pressure of 175/115 mm. Hg. There was generalized abdominal tenderness. Multiple bruises were present over her body, and there were 4 or 5 large external hemorrhoids. Neurologic examination was normal.

After 3 or 4 days she gradually developed muscular weakness, dizziness, and progressive confusion. She became unable to hold objects and developed a tremor. Her blood pressure dropped to 120/75 mm. Hg. At the end of 2 weeks she rapidly developed an ascending paralysis with final involvement of her muscles of deglutition, necessitating a tracheotomy. Laboratory work was normal initially. On the twenty-third hospital day porphyrins were demonstrated in the urine. On the thirty-second hospital day a low serum potassium (2.6 mEq/L) was noted (table 1), and electrocardiographic changes suggestive of hypokaliemia were demonstrated (figure 1-A). Subsequently she received 60–100 mEq. of K daily intravenously and by mouth, with a rise of serum K to normal (5.0 mEq/L) and improvement in the ECG pattern (figure 1-B). She finally died after 45 days in the hospital.

Case 2.—K. P., a 28-year-old white woman, was admitted to the Gallinger Municipal Hospital with a history of ascending paralysis of 24 hours' duration, finally interfering with respiration. A diagnosis of acute porphyria had been made 4 weeks previously. An aunt died of acute porphyria 1 year prior to the patient's admission. Physical examination revealed paralysis of her extremities with absence of her deep tendon and abdominal reflexes and a negative plantar response. Her blood count and urinalysis were normal, and the Kahn test was negative. Examination of the urine for porphyrins showed a positive Watson-Schwartz test on 2 occasions. The presence of large amounts of coproporphyrins was found on one occasion. A low serum potassium was found (table 1) and an electrocardiogram taken 3 days after admission showed changes compatible with hypokaliemia (figure 1-C). After a stormy course she was transferred to another hospital where she died.

Case 3.—E. A., a 41-year-old Army housewife, had her excellent health interrupted in September 1951. At

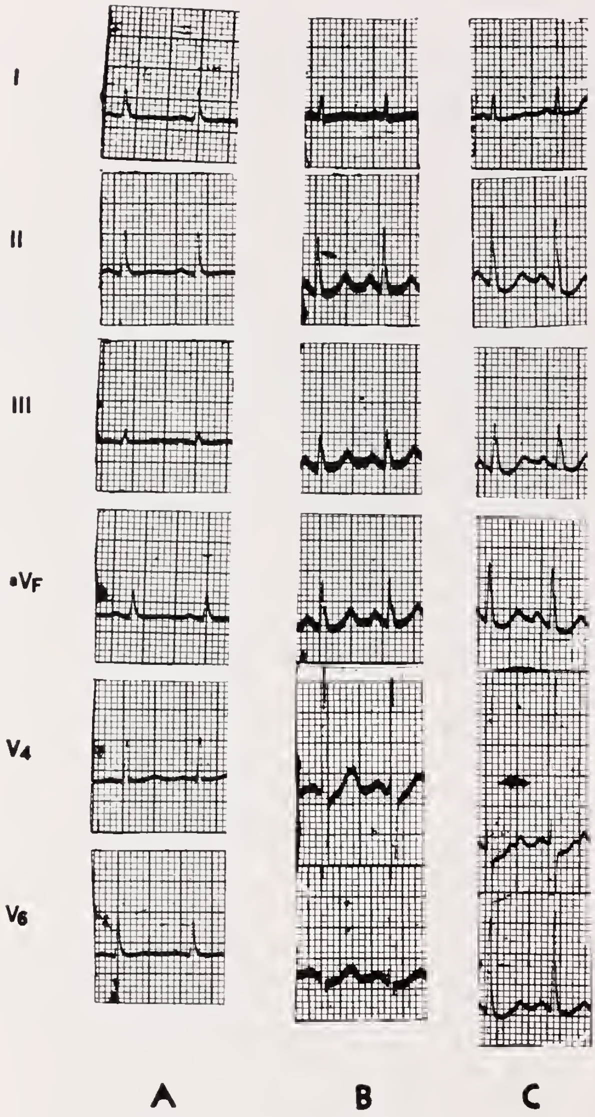

Figure 1

A. Case A. H. Before therapy with KCl. Serum K+ = 2.6 mEq/L.

B. Case A. H. After therapy with KCl. Serum K+ = 5.0 mEq/L.

C. Case K. P. Serum K+ = 3.0 mEq/L.

that time she complained of generalized malaise and aching in both arms. In January, 1952 she again had symptoms which she thought was *la grippe*, but at this time she also noticed an orange tint to her urine. During the past year she had observed increasing pigmentation of her skin resembling sun tan, morning periorbital edema, afternoon fever, fatigue, and nocturia. She had a past history of intolerance to codeine, barbiturates, and aspirin, all of which made her excessively sleepy. Physical examination revealed no abnormalities except a deep skin tan from minimal exposure to the sun, which burned her even through her dress. Laboratory studies were normal except for a low serum potassium of 3.0 mEq/L (table 1). The urine was orange in color and positive for uroporphyrins.

Comment

In the 3 patients presented, all have shown a low serum potassium. Two of these had paralysis; the third did not, although her serum potassium level on 2 occasions was low. This suggests that the paralysis and the low serum potassium are not cause and effect, but are probably related to an underlying metabolic disturbance. Two previous reports have not shown this low serum potassium.[1, 2]

ECG changes in 2 of the patients are compatible with a low serum potassium. Eliaser and Kondo[3] reported a case in which ECG changes were observed during an acute episode of porphyria. These were interpreted as being due to coronary artery spasm but could also have conceivably been due to alterations in the serum potassium.

Prunty[4] found that during acute episodes of porphyria the urinary 17-ketosteroids were increased but returned to normal during remission. He also observed in 1 case a fall in serum potassium, sodium, chloride, and total base during the acute episode of porphyria. In 2 additional cases autopsy showed hypertrophy of the adrenal cortex. This increase in adrenal cortical activity might provide an explanation for the hypokaliemia observed in our patients, but at present there is no good explanation.

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DERMATITIS FROM FABRICS

LOUIS SCHWARTZ, M.D.

Assistant Professor of Dermatology and Syphilology, Georgetown University School of Medicine

THIS paper deals with dermatitis among those handling and wearing finished fabrics.* When one considers that the entire civilized population of the world wears fabrics, the incidence of dermatitis from them is exceedingly low. Nevertheless, there have been occasional outbreaks of dermatitis from wearing fabrics. The last outbreak was in 1941 and was due to a certain resin finish. Statistics that year from the member stores of the National Retail Dry Goods Association showed 486 complaints of dermatitis from wearing apparel. This figure compares with 61 complaints of dermatitis from cosmetics during the same period.

Fabrics are derived from 3 sources, vegetable, animal and synthetic.

VEGETABLE FABRICS

Cotton is the vegetable fiber most frequently used. Other vegetable fibers are (1) linen, made from flax, *Linum usitatissimum* (flax is also used for making twine carpets and rugs); (2) hemp (*Cannabis sativa*), used for making rope, cordage, carpets (the flowers and leaves of this plant yield hashish); (3) sisal (*Agave sisalina*), used for rope, cordage, twine; and (4) jute (*Corchorus olitorius and capsularis*), used for making sacking, burlap and twine.

Dermatitis rarely occurs from the unprocessed vegetable fibers, and when it does it is usually due to mechanical irritation of the lint or dust.

ANIMAL FABRICS

Allergic dermatitis occasionally occurs from sensitivity to unprocessed silk, wool and camel's hair, fibers derived from animal sources.

SYNTHETIC FABRICS

The principal fabrics are made of (1) glass, (2) regenerated cellulose, (3) cellulose acetate, and (4) nylon. Others of less importance are Dacron, Orlon, Saran, and Vinyon.

Glass is drawn into filaments, made into fibers, and woven into fabrics. Glass fabrics are used mostly as fireproof curtains and draperies, but dermatitis has occurred when glass fabrics were used for coat linings when other lining fabrics were scarce. Dermatitis from glass fabrics is due chiefly to mechanical irritation of the skin by the sharp fibers, but may also be due to sensitivity to the resin binders used to adhere the filament of which the fibers are composed.

No cases of dermatitis have been reported from the other unprocessed synthetic fibers, but workers engaged in making them into fabrics may develop allergic dermatitis chiefly from the yarn oils of complex composition used to condition the fibers for spinning, twisting, coning and weaving.

The principal causes of dermatitis from handling and wearing natural and synthetic fabrics are the chemicals used on them to give them luster, color, softness, and wearing qualities. These chemicals are the dyes and mordants and the various finishes.

DYES

Most fabrics used for wear are dyed. The dyes are classed as natural and synthetic. The natural dyes are rarely, if ever, used on fabrics, although they are used to dye furs. Dermatitis has not been reported from natural dyes on fabrics.

Synthetic dyes are by far most frequently used. The dyes are on the whole harmless, and when they are the cause of dermatitis it is usually due to the idiosyncrasy of the patient and on an allergic basis. Faulty dyeing of the fabrics may cause the dye to come off (bleed), stain the skin, and help cause sensitization, although the fact that the dye bleeds does not necessarily mean that it causes dermatitis. The dyes as they are contained in or on the fabrics are not primary skin irritants. The dyes may stain the skin because the abnormal pH of the perspiration may take dyes out of a fabric. Skin secretions containing abnormally high amounts of fats and oils may do the same. Under the heat of ironing or boiling certain dyes may decompose into irritant intermediates. Bichromate mordants remaining on the fabrics may cause allergic dermatitis.

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* For dermatitis in the manufacture of yarns and fabrics, see Schwartz, L., Tulipan, L., and Peck, S. M.: Occupational Diseases of the Skin, 2nd ed. Philadelphia: Lea, 1947.

Special dyes, mostly of the azo group used for dyeing synthetic fibers, may cause dermatitis. A yellow, an orange and a red azo dye used on nylon stockings have been reported as having caused dermatitis.*

Paraphenylenediamine has been used in patch-testing patients having dermatitis suspected to be caused by black-dyed fabrics. P.P.D. is primarily a fur and hair dye and now is seldom, if ever, used to dye fabrics. There are in the color index at least 38 black dyes of different chemical composition, P.P.D. being one of them. Moreover P.P.D. is a dye only when oxidized, and the completely oxidized product is inert. In view of these facts the routine patch-testing with P.P.D. of patients having dermatitis from black fabrics is arbitrary and has no sound basis.

FABRIC FINISHES

In my experience most cases of dermatitis among the handlers and wearers of fabrics have been caused by the finishes. These are applied to fabrics to enhance their appearance and feel, give them better wearing qualities, prevent runs, hold the crease, prevent wrinkling, and make them waterproof, flameproof, moldproof, mothproof, and insectproof. Some finishes are partially or totally removed by laundering, others remain more or less permanently in the fabric.

Starches, mercerizing*, and sulphonated oils were the first finishes used on fabrics to enhance their appearance and feel. Dermatitis has not been reported among wearers from starch or mercerizing finishes or fabrics, but improperly neutralized sulphonated castor oil has been reported as the cause of dermatitis from wearing socks.

Certain resin finishes are applied to prevent runs in stockings, to prevent wrinkling, or to hold the crease in fabrics. They are applied in the dye bath and adhere to the fabric as a thin film, or penetrate the fibers, or do both. Some of these resin finishes require curing, which is done by heating. Completely cured resins as a rule cause no dermatitis. But there have been instances in which undergarments and stockings on which resin finishes were used have caused dermatitis. Whether this was due to the inherent nature of the cured resin or to incomplete cure has not been definitely established.

WATERPROOF FINISHES

Insoluble metallic soaps of aluminum or lead deposited on the fabric is a method of waterproofing. Passing the fabric through a solution of paraffin in a petroleum solvent is another method. Dermatitis has not been reported from the above waterproofing finishes. But dermatitis has occurred from waterproofing finishes consisting of Japan and China wax, both of which are derived from plants belonging to the poison ivy family (*Rhus vernicefera*).

FLAMEPROOFING FINISHES

The chlorinated naphthalenes, ammonium sulfamate, boric acid and borates, di-ammonium phosphate, and antimony chloride are used for flameproofing fabrics. Chlor-acnes may occur among workers using the chlorinated naphthalenes, but no cases of chlor-acne have been reported among the wearers of fabrics flameproofed with the chemicals. However, chlor-acnes occurred in World War I among German soldiers wearing clothing made mustard gas-proof by treating with the solid chlorinated naphthalenes.

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* An additional list of dyes having caused dermatitis is given in Schwartz, Tulipan and Peck: Occupational Diseases of the Skin, pp. 275–6.

* Mercerizing consists in treating cotton thread or fabric under tension with caustic soda solution. This gives a silky sheen.

MOTHPROOFING AND LOUSICIDES

Silicofluorides (or fluosilicates) are most frequently used for mothproofing, although the chlorobenzenes (naphtha balls), chlorophenols, synthetic camphor, and others are also used. The solutions of silicofluorides (or fluosilicates) are usually sprayed on the fabrics. The silicofluorides may cause dermatitis. Hexachlorbenzene and camphor used in the form of flakes or balls are placed in the clothes or closets. Dermatitis has not been reported from fabrics exposed to camphor and naphtha balls.

Since the outbreak of World War II it has been found desirable for sanitary reasons and as a protective measure against typhus to treat clothing of our armed forces with chemicals known to kill lice and other related insects. Methylbromide, a powerful lousicide and a primary skin irritant, was used for delousing clothing. The most widely used and effective agent at present in household use is DDT (dichloro-diphenyl-trichloro-ethane). It can be used alone or in combination with other insecticides. Other insecticides, such as pyrethrum, rotenone (the active principle of derris and cube), and synthetic insecticides may be used. They are usually used in the form of sprays.

The synthetic insecticides are usually primary irritants in strong concentrations and may also be sensitizers. The natural insecticides are sensitizers, but not primary irritants.

Cases of dermatitis are not infrequent in households where Aerosol bombs containing DDT, pyrethrum, rotenone, lethane, chlordane, etc., are sprayed into closets or directly on clothing. In cases of recurrent dermatitis of the hands, face or other parts which improve when the patient is away from home and break out again on returning home, the use of insecticides in the home should be suspected as a possible cause and investigated.

ANTI-MILDEWS

Anti-mildew finishes are now used on many types of fabrics such as tenting, canvas and duck which may be exposed to the heat and moisture of warm climates. Shoe linings are also often treated with anti-mildews. There is a long list of chemicals used for mildew proofing. The following is a partial list:

Benzothiazol group. Example: Mercapto benzo thiazol.

Copper group. Example: Copper naphthenate and ammonical copper carbonate.

Cresol group. Example: Tetrabromorthocresol.

Mercury group. Example: Phenylmercuric acetate, salicylate, lactide.

Phenol group: Di-hydroxy di-chloro diphenylmethane and pentachlorphenol.

Quaternary ammonium compounds. Example: Alkyl phenoxy ethoxy dimethyl benzyl ammonium chloride.

Zinc group. Example: Zinc di-methyl di-thiocarbonate.

Miscellaneous examples of anti-mildews.

Salicylanilid, "hygenized," "puratized," "sanitized."

Many of the anti-mildews are primary irritants and sensitizers. Among those found by me to be the least likely to cause dermatitis are salicylanilid, inorganic copper compounds, zinc compounds, rosin amine d pentachlorphenate, Vancide, and Pacifate.

Among the most irritant were phenyl mercuric acetate and salicylate, tetra-bromcresol para-nitrophenol and pentachlorphenol.

Most of the dermatitis from the anti-mildews in fabrics has been reported from their use in shoe linings, although during World War II, dermatitis occurred among the armed forces from fabrics treated with anti-mildews which were used for tenting, camouflage, sacks and clothing.

DIAGNOSIS

Dermatitis from wearing apparel is not difficult to diagnose. The eruption begins at the site of contact with the offending fabric, usually several days after the garment has been worn, the time required for sensitivity to be established. If the patient is sensitive from previous exposure to the chemical in the fabric, the eruption may appear earlier. If the eruption appears after the garment has been worn for several weeks or months and it has been laundered or dry-cleaned or sprayed with an insecticide or anti-mildew during this period, the chemicals used for these purposes are the most likely cause and not the original fabric.

The eruption is usually confined to the site touched by the garment. Only in exceptional cases does the eruption spread to other sites. In such cases the sensitizing chemical may have been absorbed and deposited in distant areas of the skin. Rarely do systemic symptoms, such as elevation of temperature, occur. When the offending garment is no longer worn, the dermatitis promptly improves and in a few weeks at most disappears. If it does not, or disappears and recurs without contact with the garment, the cause is likely to be something else, such as an insecticide used in the house or closet.

The diagnosis of dermatitis from wearing apparel should be confirmed with the patch test.

PATCH TEST

The diagnostic patch test, properly carried out and interpreted is the most practical method for demonstrating the actual cause of a contact dermatitis. It is now also being used by manufacturers to determine the possible skin-irritating or sensitizing properties of wearing apparel containing new chemicals before placing them on sale to the public. This procedure is called the prophetic patch test.

The diagnostic patch test consists in applying a small portion of the suspected fabric to a site of normal skin of the patient. This is covered with innocuous impermeable material, which is then sealed to the skin by adhesive plaster. It is usually sufficient to leave the patch on for 24 hours, but sometimes when patching with low concentrations or with weak sensitizers it may be necessary to leave the patch on for 2 or 3 days but not for more than 5 days, since the patient by that time may become sensitized to the patch itself. The reactions should be read not only on the removal of the patches but every day for at least 3 days thereafter. A later or delayed reaction indicates a lesser degree of sensitivity than an early reaction. It requires considerable experience to correctly grade and interpret patch-test reactions.

If the fabric with which the patch tests were performed gives positive reaction on the patient, it should be placed on 1 or more control subjects to determine if the patient is peculiarly sensitive or if the fabric contains a primary skin irritant or a strong sensitizer.

If the fabric used in patch-testing had been subjected to laundering, dry-cleaning, spraying with insecticides, mothproofing, or the use of anti-mildews after it was purchased and a positive patch test resulted, an endeavor should be made to obtain a new piece of an exactly similar fabric which has had no such treatments, and patch tests should be performed on the patient and controls with the new fabric. This will show whether the new fabric itself or the subsequent treatment with chemicals after it was purchased is the cause of the dermatitis. If it is not possible to obtain a piece of new fabric, the old fabric may be washed in soap and water and thoroughly rinsed to remove extraneous chemicals and then used to do the patch test on the patient and the controls.

PROPHETIC PATCH TEST

The patch test for the purpose of foretelling whether a substance will or will not produce dermatitis is called the "prophetic patch test." It was devised by me to determine possible irritant qualities of new chemicals used on wearing apparel, cosmetics, or other products coming in contact with the skin before placing them on the market. The prophetic patch test is made on 200 or more individuals. Since the chemicals or compounds to be tested are new ones, it is presumed that there has been no previous contact with them.

Two series of patch tests are carried out on the same individuals 10 to 14 days apart. The first series of tests would give reactions only with a primary irritant or on subjects who have been sensitized by previous contact with the chemical. The second series performed 10 to 14 days after the first series is completed will give reactions on those sensitized by the first series.

Experience has shown that even 1 positive reaction in the second series, which did not occur in the first series, may indicate that the test substance is a sensitizer which might lead to outbreaks of dermatitis if allowed to be used by large groups.

A control patch with a similar material long used by the public without causing dermatitis should always be used on all the subjects. There should be no more reactions in either series from the substance tested than from the control substance. This procedure takes into account any polysensitive subjects, who may be among the 200.

If no reactions of sensitivity occur in the second series or there are no more reactions from the test substances than from the control substance, then the new fabric should be made into undergarments and several thousand should be distributed for trial wear in a community of 5,000 to 10,000 for several months. Any cases of dermatitis attributed to the undergarment should be carefully investigated, because, as stated before, dermatitis attributed to a fabric may be caused by dry cleaning chemicals, bleaches, strong washing powders, and detergents which may remain in the fabric from laundering. Certain after-rinses used in laundering (mercuric compounds, cationics) to make the fabrics antiseptic may also cause sensitization dermatitis. In investigating cases of dermatitis attributed to the new fabric on trial use, these facts must be considered. If it is definitely established that the new garment is the cause of several cases of dermatitis, the new fabric or new chemical used in processing it should not be placed on the market.

The "prophetic patch test" followed by trial usage in a small community has proved its value in preventing dermatitis from wearing apparel and cosmetics and is now routinely used by many large manufacturers before placing their new products on the market.

Chemists are continually developing new chemicals which when applied to fabrics may add to their usefulness and appearance. Before such chemicals are actually applied to fabrics and sold to the public it is the duty of the manufacturer to employ recognized toxicologists and dermatologists to determine their toxic and skin-irritant possibilities and place them on sale only if they are found to be harmless.

MEDICOLEGAL ASPECTS OF DERMATITIS FROM WEARING APPAREL

Claims for monetary damages against stores for dermatitis alleged to have been caused by wearing apparel are not infrequent. Since most stores carry liability insurance against such claims and since it is costly to defend them, most of such claims are settled before trial or even before legal proceedings are instituted for sums much smaller than it would cost to defend them. Such settlements are called "nuisance settlements." The lawyer for the plaintiff often accepts the case on a "contingent basis"; that is, he gets paid only if the plaintiff receives monetary damages. Such suits cost the plaintiff nothing, and the lawyer, if he loses the case, only loses his time, whereas if he wins he usually takes anywhere from one third to one half of the award.

If the case comes to court the medical witness for the plaintiff should show that (1) the dermatitis was caused by the garment as it was purchased and was not caused by any material used to clean or spray the garment after it was purchased, (2) that soaps, cosmetics, foods, drugs, etc., were not the cause of the dermatitis, and (3) that the dermatitis was not due to a peculiar idiosyncracy of the patient but to a primary irritant or powerful allergen in the fabric. All this can be proven by properly devised patch tests on the patient and control subjects.

The lawyer for the plaintiff should prove that (1) there were many other cases of dermatitis caused by the same batch of material, (2) that an irritant chemical not usually used on fabrics was contained in the fabric, and (3) that adequate skin tests and usage tests were not performed with the fabric containing the unusual chemical by the manufacturer of the chemical or fabric before it was placed on the market.

If the medical witness for the defendant is convinced that the dermatitis was not caused by the new fabric, he should attempt to demonstrate this by patch tests on the plaintiff if he is permitted, or if he is not permitted, then he should perform patch tests with the new fabric on a sufficient number of subjects to show that it does not cause dermatitis on normal people.

He should call attention to the other possible causes of the dermatitis which were not carefully considered, explored and excluded by the medical witness for the plaintiff.

If the patient permits a patch test and a reaction results, then a sufficient number of control subjects should be patch-tested in order to show that the patient has an unusual idiosyncracy, not present in the control subjects.

The lawyer for the defendant should prove that (1) the fabric was made and processed with chemicals in the manner usual in the trade, (2) that no new untried chemicals were used in its manufacture, or, if any were used, that recognized patch and usage tests were performed under the supervision of a competent dermatologist on a sufficient number of subjects which proved that the fabric was innocuous, and (3) that although the fabric has been widely used by many thousands this is the only case of complaint, or, if there are others, that the percentage of complaints among the wearers is extremely low, of the order of 1 to 10,000 or less.

Upon such testimony pro and con the merits of dermatitis cases from wearing apparel are determined in the courts.

THE RELATIONSHIP OF GASTRIC ULCER TO GASTRIC CANCER[*]

GEORGE T. PACK, M.D., F.A.C.S.
Moderator

AUBREY O. HAMPTON, M.D., F.A.C.R.
FERDINAND C. HELWIG, M.D., F.A.C.P.
LOUIS A. M. KRAUSE, M.D., F.A.C.P.
WALTER L. PALMER, M.D., F.A.C.P.
CAPTAIN ROBERT B. BROWN, M.C.,
U.S.N., F.A.C.S.
MOSES PAULSON, M.D., F.A.C.P.
Panel Participants

DR. PACK: What symptoms require radiographic investigations of the stomach? You have been discussing various diseases that simulate primarily gastric ailments; now, when would you order a radiographic examination of the stomach?

DR. KRAUSE: We run through the X-ray routine after we have ruled out the other diseases. I know that so frequently the symptoms are just reflecting the other diseases. After that, we rather liberally get our X-rays and get them early.

DR. PACK: For what age individual?

DR. KRAUSE: Anybody beyond 40 or thereabouts, say 45 years. We always feel better if we get the X-ray examination and get it early.

DR. PACK: What is the youngest patient you have seen with cancer of the stomach?

DR. KRAUSE: We had the unusual. I don't think it's a fair experience that we had at Walter Reed during the War, but we saw it in the late thirties.

DR. PAULSON: Twenty-four years.

DR. BROWN: I have seen a case or cases in the twenties.

DR. HAMPTON: I have seen it in medical students.

DR. PALMER: I have had 2 or 3 cases in the twenties, and one of my friends lost his son of cancer of the stomach at the age of 12.

DR. HELWIG: Twenty-eight years.

DR. PACK: Dr. Hampton, I shall ask you about the routine technic of examination of the stomach by X-rays, just as a summary.

DR. HAMPTON: I should like to say, rather than answer the question directly, that the technic varies with the patient. There are certain things that are always done, but routine is not a good word. The routine is to demonstrate a lesion existent in the stomach by any method known to the examiner.

DR. PACK: How does one diagnose superficial carcinoma, growing and spreading in the mucosa?

DR. HAMPTON: I think it is chiefly dependent upon demonstration of elasticity of the stomach. It is likely to be missed and called gastritis if the stomach wall is not invaded. If there is no alteration in the capacity of the stomach in the region of the lesion, it is likely to be missed and called gastritis, but in that event the stomach is distended with the barium in the hope that that part does not expand.

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[*] The material in this article is taken from a symposium on this subject presented at the Twenty-third Annual Scientific Assembly of the Medical Society of the District of Columbia, September 29, 1952. This discussion is being published in two parts, of which this is the second; the first appeared in the March issue of the MEDICAL ANNALS.

Dr. Pack: What is the significance of the meniscus sign? Do you attach any importance to that in the X-ray diagnosis?

Dr. Hampton: It is too bad that we are burdened with a sign. Its intent was good. It is seen with a small carcinoma of the stomach, but I have questioned many radiologists and few of them know exactly what it means.

Dr. Pack: How would you define it?

Dr. Hampton: I didn't come to read a paper, but I can illustrate some things much better with pictures than I can describe them, including the meniscus sign.

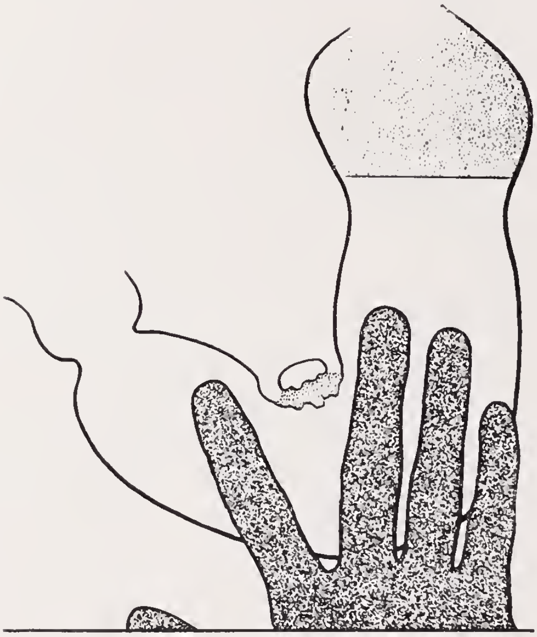

Fig. 1. A meniscus as shown during fluoroscopy.

Dr. Pack: You mean the roentgenologic features of an ulcer which favor the odds that the lesion is benign, and the roentgenologic features of an ulcer which favor the odds of a cancer?

Dr. Hampton: Yes. I have here a series of slides prepared by the Illustration Service of the Armed Forces Institute of Pathology. These slides illustrate the criteria for the differential diagnosis of benign and malignant ulceration of the stomach. They were prepared under the supervision of Colonel Thompson and the consultants of the Radiological Registry of the Armed Forces Institute of Pathology and are to be used for teaching purposes. Your first question pertained to the meniscus as described by Carmen and later by Kirklin. In Figure 1 a drawing of such a meniscus is shown as demonstrated during fluoroscopy. The lesion is flat with a dish-shaped appearance and a nodular margin. This is the appearance of a carcinoma.

The criteria for benign gastric ulcers are:

1. A sharp band, or line, of transparency, 2 mm. or less in width about the orifice of the niche (edge of ulceration) (figure 2-A).

2. At times this band may appear incomplete on one or both sides.

3. If the neck of the "collar-button"-like shadow measures up to 2 cm., it is important to find the band of translucency bounded by two parallel lines (figure 2-B).

4. Active benign ulcers show a 1 to 3 cm. wide, gently sloping, peripheral edematous elevation producing a symmetrical concavity on both sides of the crater, comparable to erythema and edema around a furuncle.

5. The ratio of depth of a benign crater to width is usually greater than in a malignant ulcer.

6. The niche usually has a smoother floor or base.

7. Barium will usually collect in the crater cavity when in the erect position. This produces a fluid level (figure 2-C).

8. Ulcer projects beyond lumen of stomach.

The criteria for malignant gastric ulcers are:

1. A malignant ulcer has a margin which is usually nodular.

2. The margins are sharp and nodular rather than parallel and more nearly 1 to 2 cm. in width (the meniscus) (figure 2-D).

3. Instead of being undermined, the edges appear rolled or rounded.

4. The malignant ulcers do not show peripheral edema.

5. The malignant ulcer is usually flatter, or more shallow, and wider and is often termed saucer-shaped.

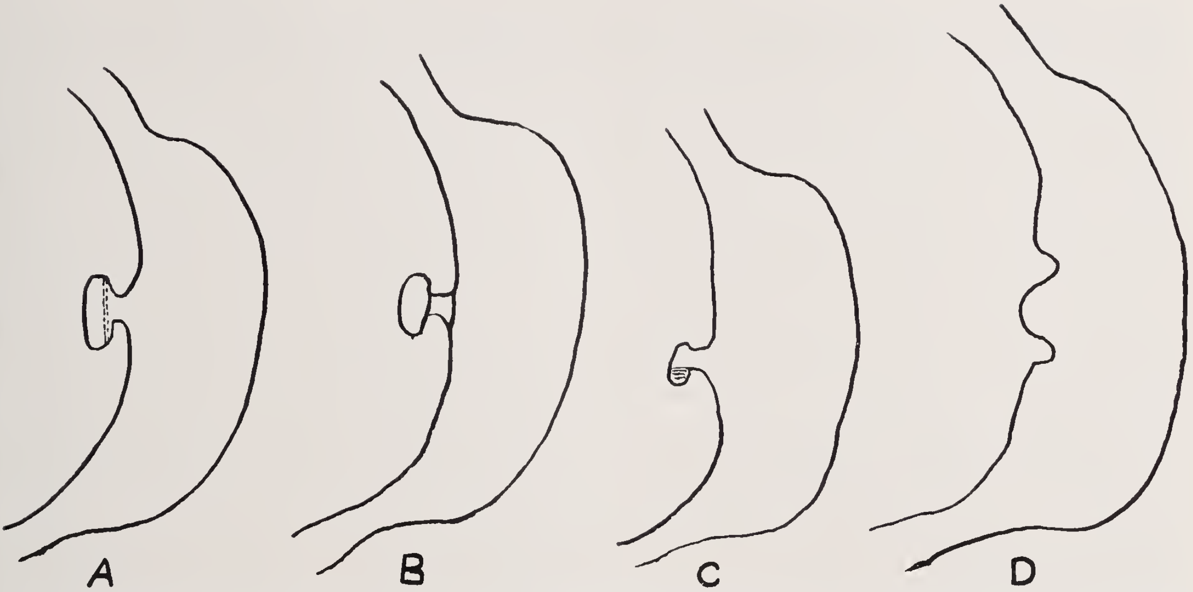

FIG. 2. Drawings illustrating criteria for benign and malignant gastric ulceration: A—Note the margin of the ulcer represented by 2 mm. band of diminished density. B—A translucent band across the neck of the "collar button." C—A fluid level is present in the upright position of many benign ulcers. D—Profile of cancer without compression (meniscus).

6. The malignant ulcer usually has an irregular or ragged floor or base.

7. Barium will not collect within the crater in the erect position, but will run out because of the rolled edges (no undermining).

8. As implied above, the malignant ulcer is generally within the lumen of the stomach.

DR. PACK: Thank you, Dr. Hampton. I think that from time to time pathologists have commented on the fusion of the muscularis mucosa with the muscular coat at the margin of the benign or cicatrizing gastric ulcer in distinction to an ulcerating cancer of the stomach. Isn't that true, Dr. Helwig? Did you have any comment to make about this? Not about the X-ray, but about the pictures that you saw.

DR. HELWIG: Well, I think that if I can interpret them as a pathologist, they are very sensible. However, in discussing anything about X-rays, I feel like the preacher talking about places where I have not been and things that I have not seen. On the other hand, I think that the over-all pictures here would very well fit in with what we would anticipate finding and are a genuine contribution.

DR. PACK: Can we now summarize the clinical features of an ulcer that is thought to be benign and the clinical features of an ulcer which is thought to be cancerous?

DR. KRAUSE: The patient with a benign ulcer should have a good appetite and a sense of well-being when he is not complaining of discomfort, and he will improve within a few weeks. The patient with a malignant lesion, no matter what he is given, will lose the effect of psychotherapy after a few days with return of the same complaints. He will have a lack of appetite and a persistence of a gnawing type of pain or discomfort in the epigastrium.

DR. PALMER: I don't think I would be willing to summarize the difference in a few words for the reason that all gastric lesions of this sort must be subdefined and considered malignant until proved otherwise. Patients with ulcerating carcinomas can gain weight, they can be completely relieved of their distress, they can eat well, and they can have no occult blood in the stool, yet the lesion will be malignant. I look upon all these lesions as potentially malignant from a practical point of view. I mean by that, possibly malignant, until proved otherwise. It is not necessary to have microscopic proof as some people might demand, but we want either that or clinical proof, and by that I mean complete healing; roentgenologically and gastroscopically, when it can be seen. I might say then that one does not undertake to treat medically a given gastric lesion unless all of these criteria fit in with a benign lesion. I am trying to say that while there are pathognomonic signs of malignancy, many of them, there are no pathognomonic signs of benignancy except microscopic, which are sometimes wrong, and the clinical course, which may be confusing.

Dr. Pack: Dr. Paulson, what are the endoscopic features of benign and malignant ulceration of the stomach?

Dr. Paulson: The gastroscopist feels that in many instances he can clearly delineate a lesion as to whether it is benign or malignant, assuming of course that he can see it. There are certain blind areas in the stomach in which the instrument as it is now devised does not permit adequate visualization. For instance, one cannot well see, as a rule, along the lesser curvature of the antrum and also the prepyloric region just adjacent to the lesser curvature of the antrum where many malignant lesions occur. He is not able to see along the dome of the stomach which is opposite the esophagus to the left, over the fornix, or into the fornix. He is not able to see along the posterior wall, at least that part of the posterior wall along which the instrument rides, and there is a small area along the greater curvature of the stomach at its most dependent part that cannot be visualized either. If he sees a lesion in its entirety, there are certain distinctive gross characteristics that make it sometimes easier for him to determine by gross appearance its benignancy or its malignancy. He can sometimes do that much better than by having the gross specimen in his hand. Some might question that, but of course through the gastroscope, one sees the actual living tissue. As one has the excised specimen in his hand, many of the markings are gone.

Benign ulceration is characterized by a grey base which is very sharply demarcated from the surrounding gastric mucosa with a very sharp edge about the ulcer and no extension into the surrounding mucosa. Malignancy may manifest itself as a necrotic base extending out to the surrounding tissue beyond the margin and sometimes appears as an almost flat lesion, extending into the adjacent and contiguous tissue. Often there is no great difficulty grossly in saying that this lesion is probably benign or this lesion is probably malignant. These lesions, however, are not always as clear-cut as above indicated. When a lesion is seen in the antrum, even though it looks grossly benign as far as the gastroscope is concerned, one is frankly disturbed on statistical grounds because it is known that most of the lesions in the antrum prove to be malignant. It is now possible to secure biopsies of the stomach by means of two different types of gastroscopes, one of which is made in this country and the other in Scandinavia. I have had considerable experience with one of the instruments, but I must say that biopsies taken from the stomach present all the vagaries and all the disappointments and difficulties and limitations which are present when any material for biopsy is taken from any source by means of the endoscopic method wherever the endoscope may be used. The present instruments available are by no means perfect. More often one is not able to get the proper biopsy through the present gastroscope. If the lesion is diffuse, one can get adequate biopsy material, but if the lesion is highly localized, one may find great difficulty in approximating the forceps through the present flexible gastroscope to the lesion itself.

Dr. Pack: May I ask if you use vertical gastroscopy? The patient is placed in the vertical position to aid in seeing the "blind" spot.

Dr. Paulson: I am well acquainted with the vertical position. I have used it on a few occasions, but I must confess not frequently enough.

Dr. Pack: I was very much interested in your comment relative to the gastroscopic appearance of the mucosa surrounding the carcinomatous ulcer, in which you stated the cancer could be seen, i.e., as a flat and apparently infiltrating lesion obscuring the rugal pattern in the immediate proximity of the ulcer. One can recall the colored lantern slide shown by Dr. Hampton of an ulcerative defect which was a carcinomatous ulcer that appeared to have the same plateau level surrounding the ulcer crater, so that the rugae did not run up to the actual ulcer. I would like to ask Dr. Hampton, apropos of that and of Dr. Paulson's statement of the gastroscopic picture, whether, fluoroscopically and radiographically, converging rugae are of any help in the case of the ulcer if they go up to the margin, and in the case of cancer, where they are stopped short by the infiltration surrounding the margins?

Dr. Hampton: In the gross specimen it is thoroughly apparent that the mucosal folds do end at the rolled margin of the carcinoma. They end abruptly, but they do converge; whereas in an ulcer, they fade out gradually into this edematous area. One has difficulty in determining whether they proceed to the ulcer or not. The edema would obliterate the mucosal folds just the same as infiltration. *En face* views, i.e., those views end-on of an ulcer which show mucosal folds are not nearly as valuable in differential diagnosis as profile views.

Dr. Pack: Does the study of exfoliative cytology of the stomach, i.e., the Papanicolaou test, aid in the differential diagnosis of gastric ulcer and gastric cancer?

Dr. Helwig: We have had no luck at all in this method because of several factors, viz., the trapping of the cells and the digestive action of the juices. There have been, however, rather good results by several methods with which I have had no experience. These are the abrasive balloon method and the method recently advocated by Trout and Rosenthal, in which the enzyme papain is used to dissolve the mucus before removing the contents. In 279 cases with gastric complaints they isolated what they considered malignant cells in some 17 cases, of which 14 proved to be cancer at the time of surgery. I understand also that there has been considerable success obtained by attaching a sponge to the end of a Levine tube. I must confess, however, that I have been very much disappointed by my own results.

Dr. Palmer: Maybe what Dr. Helwig needs is an enthusiastic young man to go after this problem, since we have had much better luck. Fourteen months ago Dr. Rubin came to work with us. He was very much interested in this problem. He had had no previous experience except 2 weeks in Dr. Papanicolaou's laboratory and a few days with Dr. Henry Lemon in Boston. I asked him to collect the data with respect to ulcers of the type which we have under discussion today. This work has all been done in the last 14 months. There were a total of 34 lesions, of which 10 were malignant and 24 benign. The 10 malignant ulcers were ulcers in which the differential problem arose. Dr. Rubin, with his own procedure, using the abrasive balloon and papain digestion found malignant cells, or at least cells which he considered malignant, in 6 of the 10. In other words, he initially reported 6 of them as positive and 4 of them as negative. The material was then turned over to a more experienced worker for review and analysis. This more experienced worker found malignant cells in 9 of the 10, rather than in the 6. I think then that this method would be very helpful in the type of case we have under discussion. This contrasts, as you see, with the 24 benign ulcers, in none of which did Dr. Rubin find cells which he considered typical of neoplasm. His batting average in the benign ulcers was 100 per cent and in the malignant ulcers, 60 per cent, and, as I said, when the material was restudied, it was 90 per cent. I think this method is not to be used as a case-finding procedure or anything of that sort. It is too laborious and time-consuming, but I am convinced that in selected cases it can be extremely informative.

Dr. Krause: I would agree with Dr. Palmer on the Papanicoloau test.

Dr. Pack: What contributions have been made by the study of experimental gastric cancer to the solution of the problem of the etiological relationship of ulcer to cancer?

Dr. Helwig: As far as I know, there has been none. If anyone has produced a gastric cancer on top of a gastric ulcer, I do not know of it. Definite carcinoma of the stomach has been produced by placing suture material saturated with methylcholanthrene and other carcinogenic hydrocarbons, but efforts to produce a chronic ulcer and then superimpose carcinoma by a carcinogenic agent, as far as I know, has met with uniform failure. Dr. Ivy and his associates have been working on this problem without producing any definite malignant changes. They have produced some scars with incarceration of islands of epithelium in the scar tissue by methods similar to that of Stewart and Lorenz, and as reported in a recent issue of *Cancer Research*, by implanting portions of gastric mucosa into the anterior abdominal wall of rats and using certain solvents along with carcinogenic hydrocarbons, but thus far no success has been obtained.

Dr. Pack: Does gastritis have any etiologic relationship to gastric ulcer and gastric cancer?

Dr. Helwig: That is certainly a moot question. I think anyone who has read Konjetzny's monographs of some years ago dismisses the relationship not too lightly. If you look at his beautiful photomicrographs of the progress from so-called atrophic hyperplastic gastritis through polypoid hyperplasia to carcinoma in his very carefully reasoned paper, I don't think you would simply disregard the work. However, there are a number of things which I believe Stewart has brought out which suggest that the gastritis might be incidental: first, many people in the cancer age have types of gastritis; second, the gastritis associated with cancer is often nonspecific; and third, often early cancer is not associated with gastritis. For all those reasons, they believe that there is evidence, or at least some evidence, to suggest a causal relationship, perhaps not for the primary ulcerating carcinoma but for the polypoid carcinoma.

Dr. Paulson: I don't think we can ignore this work. Certainly in pernicious anemia, for example, patchy, gastric atrophy or atrophic gastritis is a concomitant. As a matter of fact, there is some reason to believe that the gastric atrophy even precedes the pernicious anemia. The incidence of cancer in that particular group is certainly greater than in the general population; and if my memory serves me correctly, Rigler, the radiologist at the University of Minnesota, has pointed out the large increase in the number of polypi that he has been able to detect in the stomach of those with pernicious anemia. When these patients were gastroscoped, they were found to have atrophic gastritis or, probably more accurately, atrophy of the mucous membrane, since this is probably a degenerative rather than an inflammatory process.

The other point is that it becomes highly questionable as to how many people who have gastric atrophy and pernicious anemia actually have the gastric atrophy corrected by means of effective anti-pernicious anemia therapy. Therefore, atrophic gastritis or atrophy of the gastric mucous membranes, patchy or otherwise, especially in association with achlorhydria, whether the patient has pernicious anemia or not, should be watched, because it is in this condition that polypi may well take place and malignant degeneration eventually occur.

Dr. Pack: We have quite a different opinion in our own hospital. The paper by Stewart and Guiss was based on specimens that we furnished them, and it is true that statistically it is difficult to prove the etiologic relationship between atrophic gastritis and cancer. It is also true that some of the carcinomas of the stomach are associated with apparently normal mucosa. We do have a group of key cases, however, which I think are significant and which I went over years ago with Dr. Ewing, in which we were able to trace the relationship in different portions of the mucosa. I am inclined to attribute more importance perhaps to certain specific cases in which can be seen, for instance, carcinoma in situ. There was 1 patient with more than 30 independent primary cancers, 2 of which were well developed cancers in the stomach.

DR. HELWIG: May I ask, Dr. Pack, were any of those multicentric, in situ cancers associated with heterotopia?

DR. PACK: There was some argument. This woman with 30 cancers had 2 which were infiltrating. There were some others in which the diagnosis was questioned—whether they were instances of heterotopia instead of precancerous lesions or superficial adenomata-malignum.

DR. HELWIG: Don't you feel that there is some evidence that cancer may have a background in heterotopia?

DR. PACK: That, of course, is difficult to prove. Konjetzny had some illustrations that were strongly suggestive of that in a classical article with which we should all be familiar.

What percentage error exists in the clinical diagnosis of cancer?

DR. BROWN: You are talking about all cancers?

DR. PACK: Well, the diagnosis of ulcerating carcinoma.

DR. BROWN: I have no exact figures, but it probably lies between 10 and 50 per cent. That is quite a great spread, I realize, but it is a lot greater than the error in the diagnosis between benign ulcer and cancer.

DR. PACK: How often do the pathologic and radiographic opinions differ, as proved after surgical excision?

DR. HAMPTON: I do not know exactly. The radiographic error is established at 10 per cent, but I do not know what the pathologist's error is.

DR. HELWIG: I would say around 15 per cent. Of course, pathologists have no error.

DR. PACK: Dr. Helwig, since you admit your infallibility, I should like to ask you this question. What percentage of excised ulcers with gross or macroscopic evidence of benignancy as you have it in your hand are found to be cancers on microscopic examination?

DR. HELWIG: Again I think that depends on the pathologist, because there seems to be a difference of opinion as to what constitutes a carcinoma. These figures range, I would say, in Wilson and McCarty's time about a half century ago, around 70 per cent down to Dr. Ewing's figures of about 5 per cent. I wouldn't be able to say, but I do think that from actual gross impression the pathologist can pick up carcinoma in at least all but 10 per cent.

DR. PACK: I am not referring to the frequency with which cancer, so to speak, becomes engrafted on ulcer. I am now referring to the instances in which the pathologist, in his own laboratory, where he has made a gross examination of the surgical or postmortem specimen, states that this is a benign ulcer as far as he can tell on gross appearance, and the microscope proves him wrong.

DR. HELWIG: Ten per cent.

DR. BROWN: I would like to ask Dr. Helwig how much he thinks he could reduce this percentage by doing 1 or more frozen sections at the time of receiving the specimen?

DR. HELWIG: I think it can be reduced considerably, possibly down to 2 or 3 per cent, but I have always felt that, if the frozen section is positive, the lesion is a cancer, but, if the section is negative, it may still be cancer.

DR. PACK: Of course, the important conclusion to draw from this is that experienced pathologists, capable and familiar with this problem, having the excised specimen in their hand, make an error of 10 to 15 per cent by considering these ulcers benign when they are malignant. It is asking a great deal of the radiologists to interpret the shadows he sees in an X-ray film and even asking more from a clinician to make a diagnosis between a benign and malignant ulcer of the stomach. This percentage is extremely important, because certainly the operative mortality for the resection of gastric ulcer does not approach 10 or 15 per cent.

DR. PALMER: I think the implication that combined clinical studies cannot do better than the gross inspection of the specimen by the pathologist is incorrect. I think we can do better than 10 per cent.

DR. PACK: I have the statistical data on 78 resections of the stomach for ulcers that were diagnosed radiographically and gastroscopically as benign and were proven to be benign. I have 39 gastric resections for ulcer that were diagnosed radiographically, gastroscopically, and clinically as benign that on microscopic study proved to be cancer. The 39 cases diagnosed as benign were reviewed postoperatively with the gastroscopist and the radiologist with all the other evidence at hand, and all admitted that if they had it to do over again, they still would not state that these ulcers were malignant. This is an actual statistical study which has recently been completed and is ready for press. I am not referring to the accuracy of the diagnosis of all gastric cancers, but I will say that our accuracy is a little better than 94 per cent in all cases, using a combination of clinical, radiographic and gastroscopic means. I am referring now to the ulceral cancers of the stomach which are confused with the benign gastric ulcers. I admit that after this study we have been more inclined to perform surgical treatment of gastric ulcer, particularly in view of the fact that statistics from other places as well show this incidence, as Dr. Helwig says, of 10 per cent with microscopic evidence of cancer when grossly you hold it in your hand and think it is not. Certainly I would say that the operative mortality is not that great.

I would like to ask this one more question, which I think is important: What is the evidence for or against the development of cancer upon a preëxisting benign gastric ulcer?

DR. KRAUSE: I don't think there is any. I haven't seen a benign ulcer that became malignant.

DR. BROWN: I know of no evidence that proves it one way or the other.

DR. HELWIG: Well, it is according to what postulates one accepts as to this so-called development. I, personally, have never seen a case that I would absolutely confess has been grafted on a chronic ulcer, but there has been so much, in the literature at least, as to the criteria for this, and I don't believe that any of them were infallible criteria. I think Drs. Palmer and Pack have seen healed in situ carcinomatous ulcer that had been epithelialized over by cancer cells. There is always the question of in situ carcinoma which may go on for years as it does in other locations, like the skin, the cervix and the mammary gland, which in itself can, in the stomach, be subject to secondary peptic ulceration. I believe, Dr. Pack, you mentioned a case some years back in which the whole cancer apparently was destroyed by the action of the peptic juices and the ulcer had completely vanished, and yet there were already nodes with metastases in the regional area. So, the proof for the engrafting of a carcinoma on a chronic ulcer is to me something that I don't believe we can absolutely and unequivocally say ever occurs.

DR. PALMER: I agree completely with Dr. Krause and Dr. Helwig.

DR. HAMPTON: I think the proof would depend on radiographic demonstration of the lesion, its exact location, and then cancer at the same place. In the first instance, it would be necessary to have all the requirements for a benign ulcer and the next time all the requirements for a carcinoma. I have seen one that 5 years later was carcinoma. I thought it was carcinoma to start with, so I don't think I have seen any.

DR. BROWN: As I have stated, I have never seen one that I thought demonstrated conclusively that carcinoma developed on benign gastric ulcer.

DR. PACK: Dr. Paulson, have you ever seen one?

DR. PAULSON: No, I have not.

DR. PACK: It seems to be quite a rarity. I think Dr. Ewing, reviewing his earlier studies in his later years, came to that conclusion too, that he had never seen a specimen in which he could say with certainty that carcinoma developed on the basis of a preëxisting benign ulcer.

President's Page

'THE PUBLIC WILL BE SATISFIED WITH NOTHING LESS'

The fight against socialized medicine is not over. Because we have a new and sympathetic administration here in Washington we must not think that the forces for compulsory health insurance no longer exist. The Oscar Ewings and the Dingells are still active. In fact, Dingell has reintroduced his bill for compulsory health insurance. Although there is little chance that it will be passed in the next four years, it is possible that some apparently innocuous legislation could get through and give Government a foothold in the door of medicine. In fact, our new President stated in his recent message on the State of the Union that he would appoint a commission to advise him as to the amount of participation of local, state and Federal governments in the program of medical care. That is what ex-President Truman asked the Magnuson Commission to do, with the result that the Commission, a hard-working and conscientious group, came forth with the recommendation that the Federal Government should contribute a billion dollars toward a health insurance program, which would not only increase taxes but lead to the possibility of Federal control.

There is only one answer, and that is extension of our voluntary medical insurance to give essentially complete coverage for medical care to practically all of our self-supporting people. Our own experience shows how avid the people are for sickness insurance. After four years our Blue Shield Plan, Medical Service, has 365,000 persons covered and 1,573 physicians participating. Medical Service is one of 78 Blue Shield Plans, which provide benefits to 24,000,000 people. But the coverage is incomplete. Medical Service pays surgical and obstetrical fees, listing 1,200 items in the schedule of fees. Medical care and X-ray and laboratory service for hospitalized patients will probably soon be included. Our progress has been rapid, but we cannot relax; we must bend our efforts to provide for every service and to bring everyone into the Plan. It is only by proving that we can solve the problem of providing adequate medical care to all that the battle can be won.

Bringing this about will call for new thinking on the part of doctors. They must accept and support the insurance principle. They must get accustomed to being paid from a central office instead of by individuals. They must be willing to live on less, for a while at least, until the Plans have acquired the necessary know-how. They will have to pay a price to forestall state medicine, but the price will be worth it.

Our job as individual doctors is to urge our patients and friends to participate in the Plan. Our interest in our patients should be not only professional but personal. We must not only provide them with medical care but make it possible for them to afford it. In the end the majority will be satisfied and the standard of medical care will be maintained on the present high plane. The public will be satisfied with nothing less.

Wallace M. Yater

Editorials

THE TRUTH ABOUT "TRUTH SERUM"

The recent publicity given to the use of so-called "truth serum" to obtain data in court emphasizes the need to clear up some widely prevalent misconceptions regarding the scientific validity of such procedures.

To begin with, the idea of extracting the "truth" by the use of drugs is as old as the hills—certainly as old as the hills of Rome, as witness the old Latin proverb, *in vino veritas*. The Romans, and most likely the Greeks and Persians before them, recognized that a man often gave away the truth when "in his cups."

The term "truth serum" (most likely the invention of some enterprising reporter in the twenties) is highly misleading to the lay public. The medical world hardly needs any reminder that the term is a misnomer for two excellent reasons: first, it is not a serum; second, its use does not always elicit the truth.

To dispel the aura of mysterious pseudoscience with which the newspapers have surrounded such procedures, they should correctly be referred to as interviews under narcosis, usually intravenously administered. The term "sodium amytal interview" is often properly used to designate one of the drugs commonly employed to induce narcosis. The unfortunate terms, "narcoanalysis" and "narcosynthesis," introduced by Grinker and Spiegel in 1943, did more to confuse than to clarify the situation and are fortunately falling into well-deserved disuse.

Many other drugs, chemicals, and gases have been used over the years "to get patients to talk." In 1929 Loewenhart, Lorenz, et al used carbon dioxide inhalations on acute catatonics with dramatic but short-lived success. At present the intravenous barbiturates are the drugs of choice, sodium amytal and sodium pentothal being the most frequently used. The common denominator in all these substances, be it alcohol, carbon dioxide or barbiturates, is that they all produce a transitory depression of the cortical inhibitors permitting the release of suppressed or repressed material.

Just how reliable is the information obtained by these devices? Gerson and Victoroff,[1] in a well documented paper, "Experimental investigation into the validity of confession obtained under sodium amytal narcosis," concluded that there was no way for the examiner to distinguish truth from fantasy without reference to objective sources, and ended by stressing the limited value of such procedures as evidence in court. More recently, Redlich et al[2] reported on an interesting experiment in which they administered sodium amytal to 9 volunteers who had been instructed by an earlier examiner to conceal an embarrassing incident in their lives by a false "cover" story. Of the 9 subjects, 3 were diagnosed "normal" and 6 were diagnosed "neurotic." All 3 of the normals were able to stick to their "cover" story even under narcosis. Of the 6 neurotic subjects, 2 promptly revealed the true story, 2 made partial admissions, i.e., part fantasy and part truth, 1 admitted to a fantasy, and 1 maintained his "cover" story except for one slip.

The authors declare: "The simple use of the results of such an interrogation as straight evidence in court, i.e., without interpretation by

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[1] Gerson, M. J., and Victoroff, V. M.: J. Clin. Psychopath., 1948, **9**, 359.

[2] Redlich, F. C., Ravitz, L. S., Jr., and Dession, G. H.: Am. J. Psychiat., 1951, **107**, 586.

Opinions expressed in contributions to the Editorial Section are those of the writers and do not necessarily reflect the views of The Medical Society of the District of Columbia.

psychiatric experts, does not seem justified. . . . In our opinion, only individuals who for conscious and unconscious reasons are inclined to confess will yield to interrogation under narcoanalysis. . . .We think that in most instances confessions of such persons may be obtained just as easily without the use of drugs." To all of this we can add a hearty "Amen"!

What, then, are the legitimate fields of medical usefulness for interviews under narcosis? Actually, there are many. The use of intravenous barbiturates is often quite valuable in providing information or relieving symptoms in hysterical amnesia, catatonic mutism, acute and transient situational disorders in which speech-blocking is prominent, disturbing conversion reactions, and acute panic. It is important to remember that the setting in which the drug is administered and the character of the physician-patient relationship are two highly important factors in determining the validity of the revealed material. If the setting is a prison cell or a courtroom instead of a hospital, and if the physician is hostile rather than friendly, whatever data, if any, are derived from the procedure will be entirely useless.

In summary, it is wise to look on the interview under narcosis as a useful adjunct to the psychiatric study and treatment of selected patients. It can never replace the careful and painstaking psychiatric investigation. As a supposedly infallible technic for arriving at the "TRUTH," it is a particularly dangerous and misleading tool unless the results are subjected to the most critical analysis by trained and experienced psychiatrists.

Zigmond M. Lebensohn, M.D.

THE QUESTION HOUR

One of the neglected parts of the curriculum in some medical schools is the teaching of social and economic aspects of medical practice. Nor is the lack of such teaching compensated for during the time graduates spend as house officers in hospitals. Consequently many physicians enter practice with vague ideas at best about setting up an office, insurance, medical society activities, and the many other things that are vital to efficient medical practice.

For many years Theodore Wiprud, Secretary of the Medical Society of the District of Columbia, has been talking and writing about the need for teaching medical students and young physicians more than the scientific stuff that preoccupies the minds of most medical educators. As a matter of fact, he has taught medical economics in two medical schools, Marquette and Georgetown, both of which had courses on medical socioeconomics. It is therefore not surprising to find him launching a similar educational endeavor, the "Question Hour," sponsored by the Medical Society of the District of Columbia.

The first "Question Hour" will be held on April 9, 1953, at Gallinger Municipal Hospital, as a part of that hospital's regular educational program for its house officers. Mr. Wiprud will act as moderator for a group consisting of a lawyer and several physicians—all men who can satisfy the needs of the audience for information of the sort they will need for successful practice in these times of social and economic change. It is planned that the performance will be repeated on May 13 in the Medical Society's auditorium, with a view to reaching a larger audience composed of medical students and the house officers from other hospitals in this Metropolitan Area.

The wisdom of offering the "Question Hour" to medical students was amply confirmed by the content of the April Part II National Board Examination. In that examination a number of fourth-year students were shocked by questions relating to medical and hospitalization insurance, questions for which they were unprepared. Although the "Question Hour" comes too late to help these men for that examination, it comes in plenty of time to help them be better doctors.

H. H. H.

"STRIKE BACK!"

April is the time of year when a resurgence of life manifests itself in nature and in the human heart. April is the month of hope on the part of the American Cancer Society in its quest for funds to continue its search for the cause and cure of cancer. Investment of money voluntarily contributed by our people has given tremendous impetus to cancer research. We already possess powerful tools which are employed effectively in the control and cure of this dread group of diseases. An invaluable store of basic information is being built up. Research technics are being developed and improved as we gain in experience. The attention directed to cancer research in recent years has had the effect of attracting a large number of young and adventurous investigators. Fields demanding specific clinical training are being manned by men with "know-how," and much progress is apparent in the control of cancer.

The basic aim of the American Cancer Society is to bring to every person in the country sufficient knowledge about cancer so that he will not lose his life needlessly, as approximately one half of cancer patients do. The Society uses every conceivable means to get cancer facts before the public. The great increase in the number of informed people can be credited largely to the vigorous and comprehensive public education program of the American Cancer Society. Teaching the public cancer's 7 danger signals has helped to save more than 70,000 lives this past year. Another 70,000 Americans died needlessly of cancer. Some of these could have been saved had they recognized cancer's danger signals. Others could have been saved if a diagnosis had been made earlier by the physician. The cancer death curve—should there be no improvement in present death rates—gives us the gloomy warning that 22,000,000 individuals now living will die of the disease. It is an ardent hope that the trend of this curve will shift in a more hopeful trend with the continued efforts of all of us interested in the cause and cure of cancer.

The American Cancer Society exists for the purpose of helping physicians to control the disease by every possible means, but the success of its program depends, completely, on the active participation of informed and aroused individuals. Professional men and women across this Nation are joined with laymen in the great crusade against cancer. A sum of $18,000,000 is needed this year for the national program of the American Cancer Society. In the District of Columbia the goal is $250,000 to finance the programs of education, research and service in Washington. Your contribution to the Cancer Crusade will be appreciated. Send your donation to the American Cancer Society, 1415 Eye Street, N.W., Washington 5, D. C.

Murray M. Copeland, M.D.
President, District of
Columbia Division,
American Cancer Society

'IT'S REASSURING—'

The other night, while my family was out of town, I had dinner alone in a small restaurant on Connecticut Avenue. Having nothing better to do, I paid considerable attention to the other diners, and eavesdropped a little (but not too obviously).

On my left were two young couples who came in just after I arrived. Each of the boys had a cocktail, but the girls had none. They enjoyed their dinner and were having a pleasant time when I left.

On my right was a party of 5, mostly in their late twenties and early thirties, and quite cosmopolitan. One was a dark-skinned gentleman with a British accent, who I assumed was from India or some other part of the southern Far

East. Another was a fair-haired American girl, Republican, who vigorously supported our new régime in the hot political discussion which took place. A quiet American boy had little to say, but another talkative American, who had "been in the Government," was very vocal. The group was completed by a very pretty, dark-haired British girl who apparently had only recently reached the voting age.

Their conversation took this course. The vocal American offered the thought (without proof, but reasonable nonetheless) that in the new Republican administration many of the "next-to-top" office holders were Democrats and remained in office because the salaries couldn't interest new Republicans, and also because these Democrats were experienced in their jobs. His theme was that these workers actually prepared all material and statements for the big officials, and that of necessity these statements would not reflect the radical changes of policy which the Republicans might wish, but rather a compromise between the desires of the new administration and those of the outgoing one. After he had talked loudly for 20 minutes, I heard the Far Easterner say, "Is that bad?"

Whereupon someone suggested that they discuss something other than politics, but the pretty British girl thought differently. Her youthful enthusiasm overflowed with admiration for the American people who were so vitally interested in their politics. She had been here throughout the presidential campaign and was tremendously impressed by the enthusiasm and interest shown by her American associates in how our government was to run and who was to run it. She would have "liked to have voted myself because it was all so interesting and important" (and besides she knew one of Stevenson's sons).

By the time I had my dessert, I was at peace with the world. It's reassuring to know that all of our young people aren't drinking too much, as some would believe, but can enjoy a quiet good time. It's reassuring that even when we have a complete change in administration the democratic processes of government keep us from going off the deep end and make our changes gradual and orderly. Finally, it's reassuring that some of our British neighbors admire us and enjoy working with us, even though we are told that "the British feeling is increasingly anti-American." Probably we're going to keep on a well-considered course and do a good job at home and abroad.

You'll note that there isn't a "medical" thought in this article, except possibly that the American people are interested in what goes on about them, in medicine as well as politics, and any changes that take place in medicine will be tempered by past experience as well as by new social concepts. It's reassuring!

F. D. C.

In and Out of Focus

BY THE OBSERVER

Confidence, but—

The special session of the House of Delegates of the American Medical Association, held at the Hotel Statler in Washington on March 14, was an historic occasion. Although it had been called specifically for the purpose of considering the establishment of a Department of Health, Education and Welfare, an address by the President of the United States made it an extraordinary event.

Officials of the American Medical Association had conferred a number of times with the President and Oveta Culp Hobby, the new Federal Security Administrator, prior to the

PRESIDENT EISENHOWER WITH LEADERS OF AMERICAN MEDICINE

The President of the United States, Dwight D. Eisenhower, with leaders of American medicine just before he addressed a special session of the American Medical Association's House of Delegates at the Hotel Statler, Washington, on March 14, 1953. Left to right: Mrs. Oveta Culp Hobby, Federal Security Administrator; Mr. Eisenhower; Dr. E. Vincent Askey, Los Angeles, Vice Speaker of the AMA House of Delegates; Dr. E. J. McCormick, Toledo, President-elect of the AMA; Dr. Dwight H. Murray, Napa, Calif., Chairman of the Board, AMA; Dr. Elmer L. Henderson, Louisville, Past President of the AMA and Chairman of the Association's Liaison Committee with the Federal Security Agency; and Dr. Louis H. Bauer, Hempstead, N. Y., President of the AMA.

special session, in regard to various aspects of the Reorganization Plan which would raise the Federal Security Administration to Cabinet status, and assurances of satisfaction with the proposal had been given on both sides. All was, therefore, sweetness and light on the rostrum the day of the special session.

When he entered the Presidential Ballroom of the Statler, President Eisenhower was greeted enthusiastically. Your Observer had never seen him in better spirits nor in apparently better health. The President spoke extemporaneously and very well. He made it clear that he was sympathetic to the objectives of the American Medical Association and that he was certain he could count on its coöperation.

Following the President's departure, Senator Robert A. Taft was introduced to the House. He received an ovation equal to that given the President. Senator Taft analyzed the Reorganization Plan and emphasized his reasons for supporting it, among them being that there was no restriction at present on the conduct of an independent agency such as the Federal Security Agency and that a Department of Health, Education and Welfare would be more responsive to the wishes of Congress and the people.

Senator Taft was followed by Dr. Bauer, Dr. Dwight Murray, Chairman of the AMA's Board of Trustees, and Dr. Elmer Henderson, former President of the AMA, all of them urging the House to approve the Reorganization Plan.

The AMA had long been in favor of a Department of Health but against the inclusion in its responsibilities of matters not related directly to the health field. However, as Dr. Henderson pointed out, the Eisenhower Administration is most friendly to the medical profession, and while the Plan is not all that might have been hoped for, he urged that the House accept "half-a-loaf" for the present.

As a result of these pleadings the House's action was a foregone conclusion. It gave unanimous approval to the Board of Trustee's recommendation that the Reorganization Plan be endorsed.

In the aura of good will which pervaded the Ballroom of the Statler, your Observer wondered whether or not many of those present were fully aware of the significance of what President Eisenhower had said. The following are excerpts from his remarks:

"Now, we thoroughly understand, also, the importance of your functions in our society. We also understand, and are determined to meet, the requirements of our population in the services that only you can provide.

"But we do have faith that Americans want to do the right thing, and the medical profession will provide the kind of services our country needs better with the coöperation and the friendship of the Administration, rather than its direction or any attempt on its part to be the big 'poobah' in this particular field."

His concluding remarks were: "I express the confidence that you people will be helpful, according to your judgment of what is good for the United States of America.

"And now let me repeat, on the part of the Administration, a most hearty welcome."

Certainly the President could not have been more warm in his praise of the AMA nor expressed a more friendly feeling for the organization. Nevertheless, the continuance of this pleasant relationship depends upon many factors. Not to be overlooked is the determination of President Eisenhower "to meet the requirements of our population." Friendly though he may be to the AMA, his first obligation is to the people of this country—their needs and demands. Being aware of this, the AMA must not rely too heavily upon the good will which now exists but act wisely and constructively in doing its part toward providing for the health needs of the Nation.

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Individual Coverage Accepted

Elsewhere in this issue of the Medical Annals will be found a report of the Committee on Medical Ethics and Deportment. It is to be hoped that those who did not hear the report at the business meeting of the Medical Society on March 4 will make it a point to read it. While it is not particularly pleasant reading, it contains information of vital importance to all members.

As readers will learn, the Committee was forced to accept a compromise after many months of effort to obtain group coverage for the Society's membership before the termination of the present contract on May 1, 1953. However, no insurance company among those which had been considered acceptable was interested. And so it was decided to recommend to members of the Society that they continue their coverage with the United States Fidelity and Guaranty Company, underwriters of the Society's group policy, for one year.

The significance of the change from group to individual coverage is that the company writing the coverage can drop the physician whom it does not consider a good risk. That is not possible under a group arrangement. As is stated in the report, there are no other advantages to members under the present contract except that in unity there is strength.

Representatives of the USF&G assured the Committee that the Company would:

1. Reinsure all members of the Society who now hold policies with that company under the group arrangement, and that it would not cancel any policy except in an extreme situation.
2. Make a thorough study of the operations of its Claims Department in Washington and make such changes as were indicated.
3. Submit to the Committee on Medical Ethics and Deportment all claims for review and recommendations, and
4. Confer immediately with the Committee in regard to these and other matters in an effort to solve mutual problems.

It was also understood that should the loss ratio materially improve, there would be a reduction in premiums.

Appended to the report are new premium rates which will become effective May 1, 1953. They are, as was expected, much higher than they have been heretofore.

Whether or not the agreement between the Society and the USF&G will bring about the results hoped for remains to be seen. Your Observer is optimistic, being confident that if both parties coöperate as they should the picture will be far different in another year.

Numerous calls which have been received at the Society's Executive Offices would indicate that the Committee's report and the professional liability situation in general have been the subject of much discussion among members. One member reported to the Secretary of the Society that a well known company would write coverage at lower rates than the USF&G. Investigation disclosed there was no basis for this report. So far no insurance company acceptable to the Committee has come forward with a better proposal than the USF&G.

The Committee takes the position that the past performance of the USF&G, which has on the whole been excellent, and the reasonable assurance that the Company will continue to write professional liability insurance in the District where others may withdraw, are far more important at this time than low premium rates. The ideal situation would be if all conditions desired by the Society's membership were met. That is the goal toward which the Committee will strive in the coming year.

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A Universal Problem

The comments of some of our physicians would lead one to conclude that poor attendance at medical meetings is peculiar to Washington. If these doctors have not done so, they should read Dr. Louis H. Bauer's President's Message in the February 28 issue of *The Journal of the American Medical Association.* He writes:

> "I have been astonished in my travels around the country to find how many physicians know little or nothing about their medical societies, how poor the attendance is at many medical meetings, and how certain ethical regulations are repeatedly ignored. There is no doubt that, particularly in our municipal areas, there are too many medical meetings and the average physician cannot keep up with all of them and still spend an evening at home. This results in poor attendance at meetings of our county societies, as attendance is not compulsory. If our county societies are to be vital influences in community health matters as they should be, then their meetings must be better attended and their members must evince active interest in them.
>
> "How are we to bring this about? We must endeavor to reduce the number of compulsory meetings and effect combined meetings whenever possible. We must start a campaign to arouse interest in our county societies, or rather interest in the activities for which county societies ought to be responsible.
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> "Years ago our county societies were largely scientific bodies. There were few, if any, socioeconomic problems besetting the profession. Medicine has become more complex, and its complexity has raised many problems. Hospital relationships, staff privileges, care of the indigent, public health facilities, relationships with voluntary health agencies, and the increasing participation of Government in medicine are some of these problems. Practically no one can practice medicine today without being involved in one or more of them. The individual practitioner cannot hope to cope with any one of these problems, let alone all, by himself. The doctor needs his county society, but the society also needs him, and neither can be wholly effective without the other."

While the District Medical Society is in fact a state medical society, it possesses many of the characteristics of a county medical organization. This has naturally determined to a large extent its program and the manner in which it conducts its affairs.

Like other state medical societies, the District Society sponsors an annual meeting known as the ANNUAL SCIENTIFIC ASSEMBLY. By any yardstick the ASSEMBLY is a highly successful meeting. The same could not be said for biweekly scientific meetings which were abandoned some two years ago in favor of the Midwinter Seminar. Attendance had fluctuated considerably for a long time and finally receded to a point where the Executive Board of the Society decided something had to be done. Upon recommendations of a special committee and with the approval of the Society, the Midwinter Seminar was substituted.

Last year's Seminar, from the standpoint of attendance, fell far short of expectations and there were misgivings about its future. At the time this is written, the 1953 Seminar has just been held and it was far more successful than its 1952 edition. Undoubtedly serious consideration will be given to its permanence.

The fact is that the hybrid character of the Society, plus the unprecedented increase in the number of organizations and meetings, has placed a damper on attendance of all medical gatherings. Each organization uses such bait as luncheons, dinners and refreshments to obtain participation and, not infrequently, to little avail.

Medical schools, too, have invaded the field of education for doctors in practice. They are offering lecture courses, hospital rounds, and clinics. Hospitals are becoming more insistent upon their staff members attending various types of meetings. So one wonders where it will all end.

It has been your Observer's theory that a new approach will have to be made in medical teaching, that emphasis will have to be placed on the audio-visual methods. Physicians are so busy these days that anything that will facilitate their absorption of medical knowledge would be welcome. This is a thought which your Observer hopes the Program Committee of the Society will consider seriously.

Just a final word about Dr. Bauer. His President's Pages are decidedly worth reading for he is one of the ablest and most realistic presidents that the American Medical Association has had.

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Medical Control of Blue Shield Plans

Most physicians not only favor medical control of Blue Shield plans, they insist upon it. A few qualify their approval by urging that it not be weighted too much on the professional side. After all, they say, subscribers to these plans also have a vital interest in them, a view in which your Observer concurs.

Washington's Blue Shield Plan, Medical Service of the District of Columbia, has an eleven-member board, consisting of seven members designated by the Medical Society, one each chosen by the United States Public Health Service, the District Health Department, the Washington Board of Trade, and the District Commissioners. Of this group, nine are physicians and only two are laymen.

On January 19, 1953, Dr. Donald Stubbs, President of the Medical Service, wrote the Society that the Board of Trustees of the Service had been considering a request of medical societies in adjacent counties of Virginia and Maryland for representation on the Board. There were 240 Coöperating Physicians in Virginia and Maryland, he stated, directly affected by the activity of the Service who are not members of the District Medical Society.

At a recent meeting the Service's Board of Trustees had voted to request the Executive Board of the Society to concur in the proposal that its membership be increased from eleven to fifteen members, the additional members to consist of one representative of the medical societies in adjacent counties in Virginia, another of the medical societies in adjacent counties in Maryland, and two additional members representing the public.

This request was approved by the Executive Board and the Society notified of its action at a business meeting on March 4, 1953. In accepting the Board's report the Society also signified its approval.

Undoubtedly the Board of Trustees of Medical Service will give careful thought, as it should, to the selection of new lay members. It is to be hoped that they will be chosen not alone because of their prominence in the community but because they are truly representative of the subscribers to the Service.

As subscribers become more conscious of their stake in the Service they will take a greater interest in its operation. It would seem to be the better part of wisdom to anticipate this interest in making the current selections.

CD Still in Doldrums The doleful state of the Civil Defense Medical Care Services for the District of Columbia has been reported in this column before. There is no point in recounting in detail again the disappointments and frustrations encountered by disillusioned physician-volunteer workers who, despite their best efforts, could not get the Services off the ground.

The late Dr. Oscar B. Hunter, charged with the responsibilities of directing the Services, refused to admit defeat longer than anyone else. But despite his Herculean efforts and the lavish use of his own funds, he found himself up against a stone wall of indifference which he could not surmount. On several occasions he called your Observer protesting vehemently against the fate which placed him in such a hopeless situation. There have been others, of course, who fared no better than Dr. Hunter and finally gave up their assignments as impossible of accomplishment.*

Your Observer is beginning to suspect that he should have listened a little more respectfully to the advice of an officer of the Medical Society when the activities of the Committee on Emergency Medical Service and its setbacks were being discussed by the Executive Board. This officer dismissed the Committee's plans to cope with an atomic attack by saying: "You're just wasting your time—when and if an attack on Washington occurs the military will take over." Perhaps he was right.

At any rate, after many years of effort the Civil Defense Medical Care Services is still a paper organization. The only hope for its realization lies with the Congress, which must appropriate sufficient funds to support an adequate program. Equally important, where the Medical Care Services is concerned, is the employment of a full-time medical director. This view is wholeheartedly concurred in by the present Coordinator of Medical Care Services, Dr. Alfred E. Brigulio, who, as a matter of fact, is more insistent on this point than anyone else. Dr. Brigulio's associates agree that no one could have done a better job under the circumstances than Dr. Brigulio has done.

It should be pointed out that Dr. Daniel L. Seckinger, who heads the over-all Civil Defense Medical Program, has been keenly conscious of this unhappy state of affairs, for the Public Health Division has fared no better than the Medical Care Services. Here, too, plans are still only on paper.

All in all the situation leads to the logical conclusion—Civil Defense, at least in the District, is unwanted. Unless there are indications to the contrary very soon, it should be abandoned.

T. W.

OBSOLETE DIATHERMY APPARATUS

After June 30, 1953, it is unlawful to operate nonconforming diathermy apparatus. The Federal Communications Commission has been most coöperative with the medical profession and manufacturers by extending for one year the deadline for replacing nonconforming diathermy equipment. After June 30, 1953, all outmoded diathermy equipment used for therapeutic purposes must meet the requirements of the Federal Communications Commission. Surgical diathermy apparatus is exempt.

Information coming to the Council on Physical Medicine and Rehabilitation indicates that there are a relatively large number of nonconforming diathermy apparatus being used in departments of physical medicine, in hospitals, in related institutions, and by physicians in their offices. To avoid a last-minute rush for equipment, physicians are advised to look into the available supply. A list of accepted diathermy apparatus may be obtained by writing to the AMA Council on Physical Medicine and Rehabilitation, 535 North Dearborn Street, Chicago 10, Ill. —J.A.M.A., 1953, **151,** 825.

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* The Secretary of the Medical Society, who had been Cochairman of the Medical Advisory Committee to Civil Defense in the District of Columbia since 1950, submitted his resignation to the District Commissioners on March 23, 1953.

INTERIM REPORT OF THE EXECUTIVE BOARD*

Your Board regrets the necessity of presenting this rather lengthy Interim Report; however, all of the subjects dealt with require the Society's action before the Annual Business Meeting in May, or for one or more reasons should be brought to the attention of our members at this meeting.

Dr. Melvin A. Casberg Proposed for Honorary Membership: Since the last meeting the Board's proposal that Dr. Casberg be elected an Honorary member of the Society has been approved by the Board of Censors. The proposal is now submitted to you for action.

Dr. Casberg, as was reported at the last meeting, is Chairman of the Armed Forces Medical Policy Council of the Office of the Secretary of Defense. He has a long and distinguished career as a medical officer in the armed forces and as a medical educator.

Dr. Casberg is a Fellow of the American College of Surgeons, a diplomate of the American Board of Surgery, and a member of the American Medical Association, the St. Louis Surgical Society, and the Los Angeles Surgical Society.

Your Board considers Dr. Casberg eminently worthy of recognition by the Society in the manner proposed.

Election of the Nominating Committee: The procedure prescribed by the Society for the election of the Nominating Committee was followed again this year. Twenty-one members of the Society, chosen by the President and confirmed by the Board, were placed on ballots which were sent to all Active and Life members. The following, having received the highest number of votes, were elected members of the Nominating Committee: Drs. Frank D. Costenbader, Benjamin F. Dean, Jr., Alfred A. J. Den, Oscar B. Hunter, Jr., Matthew White Perry, Barton W. Richwine, and Hugo V. Rizzoli.

Immediately following the reading of this report the Committee will submit its nominees for offices in the Society for the coming year.

The Committee will present the name of one nominee for each office. As announced in the notice sent members, nominations can be made from the floor, but, as provided by the Constitution and By-laws, must be made at this meeting.

Nomination of Vice President of Washington Academy of Sciences: For a number of years Dr. Frederick O. Coe has represented the Society as Vice President of the Washington Academy of Sciences. The Board is pleased to nominate him to succeed himself in that office.

Confirmation of Dr. Aris Carpousis' Membership: At the Annual Business Meeting on May 7, 1952, the Society voted that Dr. Aris Carpousis, whom the Board had recommended be not confirmed as a member, be given a hearing. The motion read "THAT the recommendation be recommitted to the Executive Board for further consideration and that Dr. Carpousis be given a hearing."

Dr. Carpousis was heard on May 26, 1952, and at the conclusion of the hearing the Board voted to recommend his confirmation by the Society.

Appointment of a Member of Board of Trustees of Group Hospitalization, Inc.: Your Executive Board submits for approval the appointment of Dr. Paul Kiernan to succeed Dr. Walter A. Bloedorn as a member of the Board of Trustees of Group Hospitalization for a term of five years.

The Board is of the opinion that Dr. Kiernan is well qualified for this assignment.

Nomination of Members to the Board of Trustees of Medical Service of the District of Columbia: The Society has been requested to nominate three of its members to the Board of Trustees of Medical Service to succeed Drs. Donald Stubbs, William P. Herbst, Jr., and Arch L. Riddick, whose terms will expire at the time of the Annual Meeting of the Service, to be held in April.

At its meeting on January 26, 1953 the Board voted to recommend to the Society that Drs. Stubbs, Herbst and Riddick be nominated to succeed themselves for a term of three years.

All of these physicians have given faithful and efficient service and, in the Board's opinion, should be continued in office. Dr. Stubbs is at present President of Medical Service, Dr. Herbst is Vice President, and Dr. Riddick is a member of the Executive Committee.

Increase in Membership of Board of Trustees of Medical Service of the District of Columbia: For some time the Board of Trustees of Medical Service has considered a request made by medical societies of

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* Adopted at a special Business Meeting of the Medical Society of the District of Columbia, March 4, 1953.

WANTED—MILLIONS OF MIRACLE MAKERS!

Over 60 million Americans can be miracle makers. You are probably one of them. Any person from 21 to 59 who is in good health and weighs 110 pounds or more is eligible.

The miracle you can perform is saving human life. Yes, you can really help save precious lives. And it is important that you do it right now!

Although the miracle of saving human life challenges the imagination, you can do it with a little of your blood. In less than an hour you can simply and painlessly donate a pint of your blood to help someone live.

The National Blood Program is calling on you to help in this miracle-making business so that no one here at home or our men fighting in Korea need die for want of this vital substance.

You are needed at your local Blood Donor Center now. Call your local Red Cross Chapter, Executive 3-7600 to schedule your donation today.

adjacent counties in Virginia and Maryland for representation on the Board. At the present time there are some 240 Coöperating Physicians in Virginia and Maryland directly affected by activities of Medical Service who are not members of the Medical Society of the District of Columbia.

Recently the Board of Trustees voted to request the Executive Board of the Medical Society to concur in its proposal that the Board of Trustees of Medical Service be increased from 11 to 15 members, the additional members to consist of one representative of the medical societies of adjacent counties in Virginia, one representative of the medical societies of adjacent counties in Maryland, and two additional members representing the public. If the Executive Board of the Medical Society concurred, the proposal would be submitted to the Participating Physicians of Medical Service for their approval.

The Board believes that the proposal is a sound one and has given its approval.

Amendment to Constitution and By-laws: Your Board presents for the Society's consideration Amendment XXIII, which reads as follows:

AMENDMENT XXIII

Section 1. Articles I and V of Chapter VIII of the Constitution and By-laws are hereby amended by changing the name of the Committee on Public Relations to the Committee on Public Information.

Section 2. Amendment XIX of the Constitution and By-laws is hereby amended by changing the name of the Committee on Medical Ethics and Deportment to the Committee on Professional Liability Insurance.

The Constitution and By-laws provides that "Amendments to the Constitution and By-laws may be adopted by a favorable concurrence of two-thirds of the votes cast at any business meeting after having been proposed in writing at a previous business meeting and a copy thereof been sent to all Active members with a notice of the meeting at which their adoption is to be voted on."

In compliance with the Society's Constitution and By-laws, the above Amendment will be submitted for a vote at the Annual Business Meeting, due notice being given members.

While this amendment is self-explanatory, it might be mentioned that the Board's reason for proposing changes in the Committees' names is that those proposed are more truly indicative of their activities.

Appointment of Delegates to United Community Services: The Society's representatives to the United Community Services are appointed annually. This year the Board appointed Dr. George Maksim, Chairman of the Committee on Public Health, as Delegate to the UCS' Board of Trustees and the Secretary of the Society to the UCS' General Assembly.

Nominees for Chairman of D.C. Medical Advisory Committee to Selective Service: In a communication addressed to the Society, dated January 16, 1953, Dr. Paul C. Barton, Executive Secretary of the National Advisory Committee to the Selective Service System, gave notice that Dr. G. Victor Simpson had asked to be relieved as Chairman of the D.C. Advisory Committee to Selective Service. The National Committee instructed Dr. Barton to request the Society for the names of three physicians from which a replacement could be chosen.

At the Board's request the President submitted the following names: Drs. Worth B. Daniels, Maurice A. Selinger and William J. Tobin.

The Society has been notified that Dr. Selinger has been designated Dr. Simpson's successor.

Annual Financial Report for 1952. [Space limitations will not permit the publication of the Report and the Budget. Members who are interested and could not attend the Business Meeting at which they were presented can obtain copies by calling the Society's office.]

Summary of Membership for 1952: . . .At the close of 1952 the Society's membership totaled 1,820, as compared to 1,777 at the beginning of the year. As in previous years the greatest increase was in the Associate membership.

All in all the Board considers the small but steady growth of the Society's membership healthy. Perhaps the saturation point has been reached where Active membership is concerned. Associate, Affiliate and Resident-Intern memberships will undoubtedly increase considerably in the next few years.

Invitation to Southern Medical Association: Upon being informed by Dr. Helen Gladys Kain, who was attending a meeting of the Southern Medical Association in Miami last November, that an invitation to that organization to hold its 1956 session in Washington, D.C. would probably be favorably considered, your Board authorized Dr. Wallace M. Yater, President of the Society, to extend an invitation to the Association.

The invitation has been officially acknowledged by Mr. C. P. Loranz, Secretary-Manager of the Association, who states that his organization is already looking forward with a great deal of pleasure to meeting in Washington in 1956. The obligation of the Society is limited to lending its coöperation in an effort to stimulate interest and attendance at the Association's meeting.

Society's Membership in Federation of Citizens' Associations: Your Board has recently been informed that the Society is no longer eligible for membership in the Federation of Citizens' Associations. In order to definitely determine its status the Board voted to request the Federation to advise whether or not the Society is still eligible and, if not, that it will be willing to tender its resignation.

The Board trusts that you will approve of its position in this matter.

General Recommendations Governing Members of The Medical Society of the District of Columbia in Their Relations with the Public and with Lay Publications: The Board's only purpose in listing this item on the agenda is to inform the Society that the complaints it has received recently with regard to publicity appearing in local newspapers have been referred to the proper Committee of the Society for its study and recommendations.

Conclusion: There are several important meetings to which members can look forward in the next few weeks.

Respectfully submitted,
JOHN MINOR, M.D., *Chairman*
WILLIAM M. BALLINGER, M.D.
WALTER FREEMAN, M.D.
HUGH H. HUSSEY, M.D.
WILLIAM ROSS MORRIS, M.D.
HERBERT P. RAMSEY, M.D.
WALLACE M. YATER, M.D.
THEODORE WIPRUD, *Secretary*

NOMINATIONS

The following nominees for elective offices were presented by the Nominating Committee at the business session of the Medical Society of the District of Columbia on March 4, 1953:

For President-elect:
Preston A. McLendon

For First Vice President:
Zigmond M. Lebensohn

For Second Vice President:
Alma Jane Speer

For Member of Executive Board:
Wallace M. Yater

For Member of Board of Censors:
Ralph M. Caulk

For Delegate to American Medical Association:
Hugh H. Hussey

For Alternate Delegate to American Medical Association:
Frederick C. Fishback

Elections to the above offices will be held at the annual business meeting of the Society, May 6, 1953.

REPORT OF THE COMMITTEE ON MEDICAL ETHICS AND DEPORTMENT*

The purpose of this report is to bring you up to date on the professional insurance liability situation in the District of Columbia and to submit recommendations for your consideration.

At best, the information contained in this report is not pleasant. Nevertheless, your Committee is not pessimistic because, difficult though the situation is, it can be materially improved within a reasonable length of time if our members will coöperate.

From time to time in recent years you have been informed of developments which led to the present crisis. It is not the intention to recount these in detail, but some repetition is unavoidable.

As long ago as 1951 your Committee notified the Society's membership that only prompt and effective action could prevent the malpractice insurance situation from becoming serious. A sharp increase in premiums had become effective on May 1, 1951. This proved to be only a forerunner of another increase on September 1, 1952 and finally a notification on October 21, 1952 that the Society's group coverage was being cancelled as of May 1, 1953. Here a bit of history is in order so that recent developments can be placed in proper perspective.

The Medical Society's present group policy, written by the United States Fidelity and Guaranty Company, has been in effect since May 1, 1925. At that time, and for several years thereafter, it was not only advantageous financially for the member to purchase a policy under the Society's group arrangement but the coverage was more comprehensive than that offered non-participants. In other words, a Society member could obtain more complete coverage at a smaller premium than non-members of the Society.

In 1948 this advantage was largely cancelled by Congress when it enacted Public Law 15. This law in effect prohibited an insurance carrier from granting groups of physicians special premium rates or coverage.

When the Society learned of the new law, officers of the Society and later your Committee decided to investigate the Society's group coverage and to determine its advantages, if any. Several meetings were held with officials of the A.H. Baker Company, General Agents for the USF&G. The Committee encountered some difficulty obtaining sufficient data on which to draw conclusions, but when it did it learned some unpleasant facts.

The Company's records revealed that 47 complaints had been filed against doctors in the District of Columbia in 1948, 56 in 1949, and 55 in 1950, the total for the three years being 158. However, not all of these complaints had been pressed. Of the 158 complaints or cases, 28 were settled out of court, 8 settled after suit, 63 were closed without payment, and 59 were still outstanding.

These figures were not reassuring when it was learned that in 1938 there were 20 new cases, which was the yearly average immediately before and after that time.

Of far more significance was the increase in loss ratios during the years 1946 to 1950. In 1946 the income from premiums was $33,186, the incurred loss and allocated claims expense was $16,291, or a loss ratio of 49.1 per cent. Three years later, in 1949, the premium income was $60,268, the incurred loss and allocated claim expense was $74,344, or a loss ratio of 123.3 per cent. In other words, the Company had earned a substantial net profit in 1946 but in 1949 had paid out and allocated for claim expense 23.3 per cent more than it had collected in premiums. It was at this point that your Committee, with the Society's approval, entered into an arrangement with the Company in which it agreed that:

1. The Committee would review all charges of malpractice involving members and submit its recommendations with respect to the merits of the claim.

2. It would provide a panel of expert witnesses who would give medical testimony when, in the opinion of the Committee, the claim was without merit.

3. It would inaugurate an educational program for physicians immediately.

As the Committee saw it, prevention was far more effective than cure and it hoped its efforts to inform members would bring the desired result. Little progress was made in 1950; in fact, the loss ratio rose to 128.4 per cent. Largely due to the Committee's efforts, the situation in 1951 was substantially improved. The Committee was informed by the A.H. Baker Company that the loss ratio for that year was 77.7 per cent. For the first time in 4 years the Company reported that the income from premiums exceeded claims and expenses.

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* Presented at a special Business Meeting of the Medical Society of the District of Columbia, March 4, 1953, and approved as read.

The year 1952 was quite another story. For some unknown reason the Claims Department of the USF&G in Washington failed to submit claims for review as had been done in 1951. When the Medical Society was notified in the fall of 1952 that its group policy would be terminated on May 1, 1953, it was learned that 115 claims had been filed during the first 9 months, none of which had been submitted for review. Explanations for this situation have still not been forthcoming.

It was at this point that a survey was made of other state medical societies by the Secretary of our Society, from which it was learned that other state medical organizations were having similar difficulties, although the situation was not as serious as in such metropolitan centers as New York, Los Angeles and Washington. Following a review of the survey, the Committee decided to make every effort to obtain group coverage from the USF&G or from some other company, because it concluded that there were decided advantages in such an arrangement although special rates and coverage had been excluded.

In the course of the Committee's investigation, it was disclosed that the National Bureau of Casualty Underwriters, representing some 150 casualty insurance companies, of which the USF&G was one, had standardized rates for professional liability insurance premiums for each state, revising them drastically upward, and that these would soon become effective. The rates were applicable to individuals only, an indication, the Committee was informed, that group coverage underwriting was considered undesirable.

While some of the major insurance companies still continue their group professional liability insurance agreements, most of them are endeavoring to withdraw from the field so that they can be more selective in the risks which they write. The USF&G has not only cancelled the Society's group coverage but their group arrangements throughout the country.

In recent weeks conferences have been held by members of your Committee with representatives of many insurance companies in an effort to obtain group coverage. One company offered to accept all physicians endorsed by the Society, but would not consider a group policy. One foreign company offered to write a group policy at very advantageous rates, but its main offices are far removed from Washington. The Committee feels strongly that a domestic company is to be preferred and that a local claims office is highly desirable if the handling of claims is to be expedited. Another insurance firm suggested that Medical Society members become self-insurers, but this was considered too experimental.

The Committee weighed the advantages of the various other plans offered, and finally concluded to recommend to members that they continue with the USF&G for another year, even though it will write coverage on an individual basis only. In a recent conversation which the Chairman and Secretary had with high officials of the USF&G in Baltimore, assurance was given that all those who are now covered under the Society's group liability insurance arrangement would have their policies renewed. However, the Company reserves the right, if its experience with an individual is too unfavorable, to cancel his policy. This, it was stated, would not happen except in an extreme situation.

The Company further agreed that it would make a thorough study of the operations of its Claims Department in Washington and make such changes as were indicated; that it would submit to the Committee all claims for review and recommendations; and that it would confer immediately with the Committee in regard to these and other matters in an effort to effect a satisfactory relationship. It was also understood that should the loss ratio materially improve the doctors would benefit by reduced premiums. As to the latter, the new premium rates will be much higher than at present. The rates which will become effective May 1, 1953 are shown in the accompanying table. Premiums in the District of Columbia will be the same regardless of the insurance company from which policies are purchased, provided the company is affiliated with the National Bureau of Casualty Underwriters.

Your Committee considers it unfortunate that the impression was gained by many members that following May 1, 1953, they could not obtain coverage on an individual basis. Some insurance agents apparently took advantage of the situation and pressed members to renew their policies immediately. Others argued that there was no value in a

NEW PREMIUM RATES

LIMITS	PHYSICIANS	SURGEONS*	X-RAY THERAPY
5/15	$ 65.00	$ 98.00	$ 98.00
10/30	87.75	132.30	132.30
15/45	100.75	151.90	151.90
20/60	106.60	160.72	160.72
25/75	111.15	167.58	167.58
30/90	115.05	173.46	173.46
40/120	119.60	180.32	180.32
50/150	122.85	185.22	185.22
75/225	130.00	196.00	196.00
100/300	133.90	201.88	201.88

* Major Surgery.

NOTE: For physicians and surgeons using X-ray therapy, it is necessary to add the X-ray charge to the physician's or surgeon's charge.

group arrangement and suggested that individual policies be taken out.

Continuance of the relationship with the USF&G on the basis outlined in this report has been recommended to the Executive Board of the Society. In a telephone poll taken in the last few days the Board approved the Committee's recommendations. Your Committee hopes that you will do the same.

Finally, a word about the need for coöperation of our members. It is true that the courts in the District of Columbia have been rather liberal with respect to claims in malpractice cases. Nevertheless, doctors, too, have been at fault. Your Committee would strongly recommend that members take the following precautions:

1. Render the best medical service of which you are capable and keep accurate and complete records of all your cases.
2. Exercise good judgment in your relations with patients, particularly where fees are concerned.
3. Refrain from commenting on another physician's work. (It is estimated by one local insurance company official that 25 per cent of the claims here have their origin in such remarks.)
4. Coöperate with the Committee on Medical Ethics and Deportment when called upon. (This includes willingness to fight unjustified claims, and to accept the Committee's advice and assistance.)

James A. Dusbabek, M.D., *Chairman*
Frank S. Bacon, M.D.
Morris Chase, M.D.
John V. Dolan, M.D.
Charles E. Fierst, M.D.
John F. Finnegan, M.D.
Frank E. Gantz, M.D.
Ernest A. Gould, M.D.
Don Johnson, M.D.
Emmett P. Madigan, M.D.
Leo Brison Norris, M.D.
William B. Walsh, M.D.
Robert E. Moran, M.D., *Advisory*
Hugo V. Rizzoli, M.D., *Advisory*
Theodore Wiprud, *Secretary*

WOMAN'S AUXILIARY NOTES

"Top o' the Mornin' " was the theme of the March meeting of the Woman's Auxiliary to the Medical Society of the District of Columbia. Gay St. Patrick's Day decorations and flowers in the Library of the Medical Society's Building at 1718 M Street, N.W. lent a festive air to the luncheon meeting held on March 11. Mrs. Ernest E. Hadley, President, presided at the business meeting preceding the luncheon.

The guest speaker was Mr. Paul Wooton, well known Washington newspaper correspondent and former President of the White House Correspondents' Association. Introduced by Mrs. Wallace M. Yater, Program Chairman, Mr. Wooton proved himself a versatile and interesting raconteur. He opened his talk with some amusing anecdotes from his assignment as head of the press delegation which covered Princess Elizabeth's visit to Washington in October, 1951. Some of his remarks related to the President's Inaugural Address; he also made a few brief comments on the current economic situation and on Anthony Eden's recent visit.

Mrs. E. Herbert Bauersfeld, Chairman of the Public Relations Committee, reported on the success of the tea given recently by the Woman's Auxiliary in conjunction with the Graduate Nurses' Association. The object of the tea was to acquaint local high school girls with the Auxiliary's Nurses Scholarship Fund and to stimulate interest in the nursing profession as a career. Superintendents from the local hospitals were present, as well as high school student counselors and representatives of the student body.

The Woman's Auxiliary maintains a special Scholarship Fund for nurses, which is a project of the Educational Committee, headed this year by Mrs. Leonard T. Peterson. These scholarships are allocated to various local hospitals and are available to any high school girl who meets the necessary requirements. Money-raising events are sponsored annually to replenish this Scholarship Fund. The Dinner Dance to be given by the Woman's Auxiliary on May 9, at the Shoreham Hotel, will benefit this fund. Mrs. G. Louis Weller, Jr., Chairman of the Ways and Means Committee, and her committee members are completing plans for this affair, which is usually one of the highlights of the social season.

Mrs. M. Noel Stow, Manager of the Woman's Auxiliary Bowling League, reported on plans for a luncheon at the Columbia Country Club on April 17. This will be the League's final luncheon of the year and members are invited to bring prospective bowlers for next year. There have been 16 bowling teams this season; enthusiasm and friendliness, mingled with good sportsmanship and keen competition, have made this project a popular one.

Chairman of the Social Committee, Mrs. Lawrence A. Rapee, reported that a class in flower arrangement will be starting in April and requested those interested to contact her.

The following officers were elected for 1953–1954:

President: Mrs. Richard H. Todd
President-elect: Mrs. Duane C. Richtmeyer
First Vice President: Mrs. Albert E. Marland
Second Vice President: Mrs. G. Louis Weller, Jr.
Treasurer: Mrs. E. Herbert Bauersfeld
Assistant Treasurer: Mrs. Hugh O. House
Recording Secretary: Mrs. David M. Nolan
Assistant Recording Secretary: Mrs. Leonard T. Peterson
Corresponding Secretary: Mrs. Ashby W. Smith
Assistant Corresponding Secretary: Mrs. Joseph H. Watson

Following the business meeting, many members lingered on to enjoy the delicious luncheon served by the House Committee. The table was tastefully decorated in a St. Patrick's Day motif—a handsome flower arrangement of green and white carnations and green candles in the tall silver candelabra. Among those who poured were Mrs. Yater, Mrs. Richtmeyer, Mrs. Eugene R. Whitmore, and Mrs. William J. B. Orr. Those assisting Mrs. John J. Calarco, Chairman of the House Committee, were Mmes. Nolan, Luther W. Gray, I. Phillips Frohman, Clarence K. Fraser, Ernest A. Gould, Sidney Berman, V. S. Lambros and James P. Kane.

Mrs. Leo C. Varden
Publicity Chairman

MEMBERSHIP

The following applicants for membership were duly elected to membership at the meeting of the Executive Board, February 23, 1953, in accord with Amendment XI, Section 2, of the Constitution and By-laws of the Society.

Active Member

Vincent Hernandez, 11 Kennedy Drive, Chevy Chase, Md.

Associate Members

Stephen L. Aldrich, 458 Glen Carlyn Drive, Falls Church, Va.
James A. Roberts, 8901 Colesville Road, Silver Spring, Md.

Resident-Intern Member

Bernard Gill McLaughlin, 1214 Savannah Place, S.E.

Affiliate Member

James P. McCarrick, 326 East Montgomery Avenue, Rockville, Md.

The following applicants for membership were duly elected to membership at the meeting of the Executive Board, March 23, 1953, in accord with Amendment XI, Section 2, of the Constitution and By-laws of the Society.

Active Members

Raymond N. Brown, 1726 Eye Street, N.W.
Virgil T. DeVault, Room 258, Walker Johnson Building
Leo I. Donovan, 8016 Georgetown Road, Bethesda, Md.
Norman W. Harris, 2802 Dumbarton Avenue, N.W.
David S. Johnsen, 2011 Massachusetts Avenue, N.W.
William W. Krause, 3000 Connecticut Avenue, N.W.
Howard Marshall Payne, 41 Quincy Place, N.W.
Lois S. Wilson, 1025 Vermont Avenue, N.W.

Associate Members

Arthur R. Bergman, 7723 Greenwood Avenue, Takoma Park, Md.

Morton D. Berkow, 220 Hamilton Street, N.W.
Charles S. Christianson, Walter Reed Army Medical Center
Lewis L. Frey, 1940 Biltmore Street, N.W.
Roll H. Markwith, Hunting Towers, Alexandria, Va.
Arno Motulsky, 8706 Barron Street, Takoma Park, Md.
Ejnar Viten-Johansen, 311 East Bellefonte Avenue, Alexandria, Va.

The following applicants for membership will be voted on at the meeting of the Executive Board, May 25, 1953.

For Active Membership

Thomas H. Alphin, University of Virginia—1947
Alfred Brockunier, Jr., Jefferson Medical College—1947
Hartford R. Burwell, Howard University—1912
Robert E. Byrne, Southwestern Medical College—1947
William B. Clotworthy, Jr., University of Tennessee—1945
Robert A. Deane, Howard University—1944
Joseph G. Gathings, Howard University—1928
Coleridge M. Gill, Howard University—1938
Clarence S. Greene, Howard University—1936
Herbert V. McKnight, Howard University—1945
Frank N. Miller, Jr., George Washington University—1948
Joseph K. Niswonger, George Washington University—1947
John A. O'Donnell, Georgetown University—1945
Joseph M. O'Neill, Georgetown University—1947
Raimundo W. Rodriguez, Howard University—1945
James E. Walker, Howard University—1932
Jack E. White, Howard University—1944

For Associate Membership

Norman Donat Comeau, Boston University—1946
Robert F. Donohoe, Georgetown University—1949
Jack Emil Geist, University of Minnesota—1948
Paul M. Ireland, University of Michigan—1920
Stephen R. LoVerme, Boston University—1946
J. Robert Teabeaut II, Duke University—1947
John P. Utz, Northwestern University—1947
Michael A. Woodbury, Harvard University—1951

For Resident-Intern Membership

Paul B. Bender, Georgetown University—1946
Louis J. Maciulla, Georgetown University—1950

CALENDAR OF SPEAKERS

The following members of the Medical Society of the District of Columbia have addressed lay groups during the past several weeks. The Society maintains a Speakers Bureau, sponsored by the Committee on Public Relations, through which requests for speakers for lay groups, including radio programs, can be filled.

Date	*Speaker*	*Subject or Title*	*Organization*
February 16	Dr. Addison M. Duval	Mental Health for Adolescents	Stuart Junior High School Parent-Teachers Association
February 22	Dr. John R. Cavanagh	What Constitutes Normality?	St. Vincent de Paul Society, St. Francis de Sales Catholic Church
February 23	Dr. Charles A. Hufnagel	Heart Diseases	Mid-City Citizens' Association
March 2	Dr. John R. Pate	Narcotics and Juvenile Delinquency	Lutheran Ministerial Association
March 3	Dr. Wallace M. Yater	Medicine in the Nation's Capital	Spring Valley-Wesley Heights Citizens' Association
March 11	Dr. Julius Schreiber	The Dynamics of Inter-group Tension	Montgomery County (Maryland) Community Center
March 16	Dr. Walter Teichmann	What Is New in Research about the Hair and Scalp	Washington Hairdressers' Association
March 18	Dr. Katherine K. Rice	Helping Parents to Understand Their Children	Help for Retarded Children, Inc.
March 20	Dr. Dorothy Donley Dowd	Crucial Factors in Developing Adolescent Personality, in a Panel Discussion on the Aspects of Guidance in a Catholic High School	Carroll High School
April 8	Dr. Julius Schreiber	The Modern Married Woman	The Temple Beth-el Sisterhood (Alexandria)

News and Personals

A Postgraduate Lecture Series, sponsored by the **D. C. Chapter of the American Academy of General Practice,** together with members from nearby counties in Maryland and Virginia, will be held on April 23 at the Mayflower Hotel, Washington. The lectures are open to all physicians in the Washington Metropolitan Area and a cordial invitation is extended to all members of the District Medical Society to attend. Registration (no charge) will open at 8 a.m. The following all-day program has been arranged:

9:00 "Cutaneous Cancer and Precancer," Jack Wolf, M.D., Assistant Professor of Clinical Dermatology and Syphilology, Post-Graduate Medical School of the New York University-Bellevue Medical Center
9:45 "Use and Abuse of Antibiotics," Erwin Neter, M.D., Children's Hospital, Buffalo, N. Y.
10:25 Recess
10:40 "Acute Abdomen," Philip Thorek, M.D., Associate Clinical Professor of Surgery, University of Illinois College of Medicine
11:30 Wyeth Teleclinic of 1952, Fourth Annual Scientific Assembly
12:15 Luncheon (reservations to be made in advance) Speaker: U. R. Bryner, M.D., Salt Lake City, Utah, President of the American Academy of General Practice; subject: "Socialized Medicine in Great Britain"
2:00 "Functional Uterine Bleeding," Robert B. Greenblatt, M.D., Professor of Endocrinology, University of Georgia School of Medicine
2:45 "Highlights of the American Academy of General Practice 1953," John S. DeTar, M.D., Milan, Michigan, Speaker of the House of Delegates of AAGP
3:30 Recess
3:45 "Backache," Edward H. Crosby, M.D., Hartford, Conn.
4:35 "The Coronary Constellation," Herman K. Hellerstein, M.D., University Hospital, Cleveland, Ohio

The lectures and luncheon will be held in the Grand Ballroom of the Mayflower Hotel. Physicians who desire to attend the luncheon should make reservations as soon as possible. Price of the luncheon is $3.65. Checks may be mailed to Dr. William Brainin, 6124 Central Avenue, Capitol Heights, Maryland.

The First World Congress on Fertility and Sterility, sponsored by the International Fertility Association in conjunction with the American Society for the Study of Sterility, will convene in New York City, May 25–31, 1953. All sessions will be held at the Henry Hudson Hotel, 353 West 57th Street, New York; to insure hotel reservations for the Congress, delegates are urged to write at once to the Hotel.

Advance registration fee for members of either the Society or the Association is $5; for non-members, $20. Remittance should be sent to the Chairman, Arrangements Committee, World Congress on Fertility and Sterility, 1160 Fifth Avenue, New York 29, N. Y.

The 1953 Eastern States Health Education Conference of The New York Academy of Medicine will be held on April 23 and 24. The program will include four sessions and an evening dinner meeting, April 23. The subject of this year's Conference will be "The Sociology of Health Education." Those interested in attending should communicate with Dr. Iago Galdston, The New York Academy of Medicine, 2 East 103rd Street, New York 29, N. Y.

The annual conclave of the American College of Allergists will be held at the Conrad Hilton Hotel in Chicago, April 24–29. The first four days will be devoted to instruction under the tutelage of recognized authorities and the last three to a discussion and reporting of recent advances in the field of allergy by the investigators themselves. Further information concerning the program may be secured from the American College of Allergists, LaSalle Medical Building, Minneapolis 2, Minn.

CALENDAR OF MEETINGS, FEBRUARY 16–MARCH 15, 1953

February 16	Obstetrical Board Committee on Blood Committee on Social Affairs, Annual Scientific Assembly
February 17	Committee on D. C. Survey of Medical Care of Indigents Graduate Nurses' Association
February 18	Liaison Committee with Woman's Auxiliary Washington Psychiatric Society
February 19	Committee on Medical Ethics and Deportment House Committee
February 20	Classification Committee Washington Psychoanalytic Society
February 21	Washington Psychoanalytic Society
February 23	Executive Board Nominating Committee Committee on Exhibits, ASA
February 24	Membership Luncheon Committee on D. C. Survey of Medical Care of Indigents
February 25	Committee on Medical Ethics and Deportment
February 26	Program Committee Health Section, United Community Services Graduate Nurses' Association
February 27	Grievance Committee Program Committee, ASA
March 3	Membership Luncheon Women's Medical Society Registered X-ray Technicians of Washington
March 4	Business Meeting of the Society Executive Board, Woman's Auxiliary
March 5	Section on Neurology and Psychiatry Woman's Auxiliary Executive Committee, Gallinger Hospital
March 6	Committee on Public Policy Washington Psychoanalytic Society
March 7	D. C. Metropolitan Chapter of American Physical Therapy Association
March 10	Committee on D. C. Survey of Medical Care of Indigents Medical Officers' Reserve Units
March 11	Subcommittee on Alcoholism Woman's Auxiliary
March 12	Committee on Public Relations D. C. Rheumatism Society
March 13	Grievance Committee Committee on D. C. Survey of Medical Care of Indigents
March 14	Washington Psychoanalytic Society

The American College of Cardiology will hold its second annual convention at the Hotel Statler in Washington, June 7, 8 and 9, 1953. The central theme of the meeting will be Diagnosis of Cardiac Diseases. A copy of the program may be obtained from the Secretary of the College, Dr. Philip Reichert, 480 Park Avenue, New York 22, N. Y.

The Seventh Annual Rocky Mountain Cancer Conference will convene in Denver on July 8 and 9. As in previous years, there will be outstanding guest speakers, and on the first evening a banquet and entertainment for both physicians and wives. There is no registration fee. Correspondence may be directed to Mr. Harvey T. Sethman, Executive Secretary, Colorado State Medical Society, 835 Republic Building, Denver 2, Colo.

The Second Annual Tuberculosis Symposium for General Practitioners will be held at Saranac Lake, New York, July 13–17, 1953. Members of the American Academy of General Practice will receive 26 hours of formal credit for attending.

The Symposium is sponsored by the Saranac Lake Medical Society and the Adirondack Counties Chapter of the New York State Academy of General Practice. It will be held in various sanatoria and laboratories in the Saranac Lake area. Many of the sessions will be informal panel discussions with ample opportunity for questions from the audience.

The registration fee is $40 for AAGP members and $50 for non-members. Registration is limited to 100 doctors. Complete information concerning this program may be obtained by writing to Dr. Richard P. Bellaire, P. O. Box 707, Saranac Lake, New York.

The Section on Pathology and Laboratory Medicine will hold its last meeting of the season on May 8 in the Medical Society's building. Following the business session residents in pathology from Washington hospitals will give a review of the current literature which has appeared in the following journals:

American Journal of Clinical Pathology (Emergency Hospital)
Journal of Pathology and Bacteriology and *Journal of Laboratory and Clinical Medicine* (Providence Hospital)
Archives of Pathology (Garfield Memorial Hospital)
Journal of Clinical Pathology and *Surgery, Gynecology and Obstetrics* (George Washington University Hospital)
Blood (Children's Hospital)

The medical staff of Walter Reed Army Hospital will be host at a dinner meeting to the **Section on Ophthalmology,** May 21, in the Officers Mess. The meeting will be addressed by Professor A. Franceschetti of Geneva, Switzerland, who will speak on "Unusual Medications in Ocular Diseases."

The Washington Medical and Surgical Society will meet on April 27 at Hotel 2400. Dr. Francis J. Murray will present a paper on "Value and Use of Control Studies in Clinical Investigation." His paper will be discussed by Drs. Laurence J. Kyle, Frederic G. Burke, and Joseph M. Barker. Dr. Harold Heiges will give a case report.

The United States Civil Service Commission calls attention to a new examination for Medical Officers for filling positions in various specialized fields of medicine. The salaries range from $5,940 to $10,800 a year.

The positions are principally in the Bureau of Indian Affairs located on reservations west of the Mississippi River and in Alaska. A few positions may also be filled in the Fish and Wildlife Service. Applicants must be fully qualified doctors of medicine, and for most positions must be currently licensed to practice medicine and surgery in a state or territory of the United States. Appropriate experience is required. Full information and application forms may be secured by writing to the Board of U. S. Civil Service Examiners, Bureau of Indian Affairs, Department of the Interior, Washington 25, D. C. No closing date has been set for applications.

The Superintendent of Schools of the City of New York is accepting applications for the position of **Chief Medical Director.**

The position is part-time (15 hours of service per week), is open to men and women, and carries a salary of $9,050 per annum; maximum age of applicant, 50 years.

Application forms may be obtained from Dr. Jacob Greenberg, Associate Superintendent in Charge of Personnel, Room 510, 110 Livingston Street, Brooklyn 1, New York, and must be filed before June 15, 1953. All questions regarding eligibility should be addressed to Mr. Arthur Klein, Examiner-in-Charge, Board of Examiners, 110 Livingston Street, Brooklyn 1, New York.

The 25th annual observance of **National Hearing Week** is scheduled for May 3–9, under the sponsorship of the American Hearing Society, which has headquarters in Washington. "Hearing Is Priceless—Protect It" is the theme for the campaign. The public will be informed about existing programs for prevention of deafness, conservation of hearing, and rehabilitation of the hard of hearing, and attention will be called to the urgent need for extended services for children and adults whose hearing is below par.

The American Board of Obstetrics and Gynecology announces that the next scheduled examinations, Part II (oral and pathological), for all candidates will be held at The Edgewater Beach Hotel, Chicago, by the entire Board from May 17 through May 24, 1953.

Applications for Certification for the 1954 (Part I) examinations are now being accepted, and candidates are urged to make such application sometime in August or September.

Candidates applying for admission to the Part I examinations are reminded that the Board now requires them to submit a list of all patients for whom they have been *solely* responsible admitted to the hospitals where they practice, for the year preceding their application or the year prior to their request for reopening of their application, with the diagnosis, pathological diagnosis, nature of treatment, and end result. This list should be submitted at the time application is made or at the time request for reopening of an application is sent, and it should be on $8\frac{1}{2}$ x 11-inch paper, unbound, and contain the name of the candidate and his address.

Requests for Applications for Appraisal of Incomplete Training, Applications for Certification, current Board Bulletins, and Preceptorship or Supplemental Training Forms should be made to Dr. Robert L. Faulkner, Secretary of the Board, 2105 Adelbert Road, Cleveland 6, Ohio.

In a recent communication from Dr. Faulkner, he expressed for the Directors of the Board their thanks to the physicians who assisted in proctoring the recent written examinations on February 6, 1953. Included in the list of physicians, who were present from all parts of the United States, was **Dr. Andrew A. Marchetti,** of Washington, D. C.

To stimulate interest in the field of physical medicine and rehabilitation, **the American Congress of Physical Medicine and Rehabilitation** announces its first **Essay Award.** Any subject of interest or pertaining to the field of physical medicine and rehabilitation may be selected. The contest, while open to anyone, is primarily directed to medical students, interns, residents, graduate students in the pre-clinical sciences, and graduate students in physical medicine and rehabilitation.

The winner will receive a gold medal, a certificate of award, and an invitation to present the contribution at the 31st Annual Session of the Congress, which will be held at the Palmer House, Chicago, August 31 through September 4, 1953. Announcement of the winner will be made before August 1, 1953.

The manuscript, to be submitted in duplicate, must not exceed 5,000 words, exclusive of references, tables, etc. It must be in the office of the Congress not later than June 1, 1953. Full details of the contest may be secured by writing to the offices of the Congress, 30 North Michigan Avenue, Chicago 2, Ill.

The Schering Award competition for 1953, now in its eighth year, has begun in the Nation's medical schools. The Award seeks to encourage original reporting. Titles of the three general topics to be used in this year's competition are: antihistaminic treatment of upper respiratory allergies and infections; hormone therapy of the degenerative diseases; and new concepts in the treatment of peptic ulcer.

Three $500 prizes will be awarded for the papers judged most distinctive by a panel of leading medical authorities on the subjects covered. To make possible wider recognition among the increasing number of participants, numerous $100 Deans' Awards will be presented this year. In each school where several students compete, the Dean is invited to select the most meritorious paper.

All students matriculated in medical schools in the United States and Canada, including those who have participated in previous competitions, are eligible. Manuscripts are limited to 5,000 words. The deadline for entry forms specifying the title chosen by the student is July 1. The actual manuscript must be postmarked by October 1. Further information and instructions for the competition are available from Schering Corporation, 2 Broad Street, Bloomfield, New Jersey.

The first issue of the *Journal of the American Geriatrics Society* has made a pleasing appearance in the Medical Society's offices with its bright red cover lettered in black and white.

The introductory article, "Aging Comes of Age," is by the Editor, Dr. W. O. Thompson, of Chicago, who is also President of the American Geriatrics Society. The Secretary of AGS, Dr. Malford W. Thewlis, has written, appropriately, a "History of The American Geriatrics Society," which has just passed its tenth birthday. In addition there are seven scientific articles, a review of current geriatric literature, and several pages devoted to conference proceedings reported by the International Association of Gerontology.

The editorial offices of the *Journal* are in Chicago, Suite 414, 700 North Michigan Avenue. The publishers are Williams & Wilkins Company, Mt. Royal and Guilford Avenues, Baltimore, 2 Md.

The Executive Board of the Medical Society of the District of Columbia held its regular meeting, February 23. Dr. Raymond T. Holden, Chairman of the Physicians Group for the 1952 Community Chest Campaign, reported that $37,422 had been collected from Washington physicians, which was 98 per cent of the quota of $37,800. The Board expressed its approval and appreciation to Dr. Holden for the results that he and his co-workers had obtained.

In accord with the recommendations of the Committee on Public Policy, the Board approved the proposal that diabetics and epileptics wear identification bracelets, providing it be done on a voluntary basis. The Board also authorized the Committee on Public Policy to investigate hospital facilities in the District of Columbia not only with respect to the number of available beds in relation to the demand but as to the general distribution of hospitals.

A committee for the selection of the Davidson Lecturer for 1953 was appointed. This committee is always selected from the members of the Executive Board; its personnel is as follows: Dr. Wallace M. Yater, Chairman; Drs. Walter Freeman, William M. Ballinger, Hugh H. Hussey, William Ross Morris and Herbert P. Ramsey.

A representative of the American Red Cross was authorized to appear before the Medical Society at its Business Meeting, March 4, to stimulate interest of members in the annual Red Cross Campaign for funds. (Dr. Kenneth R. Nelson, Medical Director of the Washington Regional Blood Center, was present at the March 4 meeting and spoke briefly on various Red Cross activities, particularly its Blood Program.)

George Washington University School of Medicine has received a renewal grant of $10,000 from the Lasdon Foundation to promote further research in the field of tuberculosis. The grant will be used for laboratory and clinical studies with particular emphasis on investigating means of suppressing the tendency of tuberculosis bacteria to develop resistance to chemotherapeutic agents used in the treatment of tuberculous patients. Directors of the research program are **Dr. Monroe J. Romansky**, Associate Professor of Medicine, **and Dr. Sol Katz**, Adjunct Clinical Professor of Medicine.

The Washington Hospital Center, Inc. elected a new board of 27 directors at its annual meeting, February 16. Previously, the board consisted of the original incorporators of the hospital organization. Each of the three participating hospitals, Emergency, Garfield and Episcopal, will be represented by nine directors, with one third of the board members physicians. Physicians and one dentist included on the new board are:

One-year terms: Dr. John Minor (Emergency), Dr. William L. Howell (Garfield), Dr. Harold Krogh, dental surgeon (Episcopal)

Two-year terms: Dr. John H. Lyons (Emergency), Dr. J. Ogle Warfield (Garfield), Dr. G. Victor Simpson (Episcopal)

Three-year terms: Dr. Robert E. Moran (Emergency), Dr. Howard P. Parker (Garfield), Dr. Aubrey D. Fischer (Episcopal).

Dr. Harry Lee Claud, President of the **Southeastern Surgical Congress,** opened the 21st Annual Session and Graduate Assembly of the Congress, March 9, at the Brown Hotel, Louisville, Kentucky. Later in the morning he delivered his Presidential Address, which was entitled, "The Challenge of the Internship and Residency Problem."

Papers presented by two other members of the District Medical Society were: "Carcinoma of the Rectum—Factors Responsible for Recurrent or Residual Disease," Dr. Garnet W. Ault, and "Repair of the Neglected Ruptured and Severed Tendon Achilles," Dr. William J. Tobin.

Dr. Paul S. Putzki discussed a paper on "The Management of Carcinoma of the Breast" by Dr. Guy W. Horsley, of Richmond. Dr. Claud and Dr. J. Ross Veal served on the Program Committee for the Congress. About 15 members of the District Medical Society attended the Congress.

Six faculty members of the Department of Medicine of Georgetown University School of Medicine attended and participated in the meetings of the **Southern Society for Clinical Research and the Southern Section of the American Federation for Clinical Research,** held in New Orleans, La., January 30 and 31. They were Drs. Hugh H. Hussey, Joseph F. Fazekas, Frank A. Finnerty, Jr., Edward D. Freis, Laurence H. Kyle, and Irving H. Brick. Drs. Fazekas and Kyle were elected to active membership in the Southern Society for Clinical Research.

The following papers were presented at these two meetings:

"Investigation of a Calcium Infusion Technic in the Study of Metabolic Bone Disease," Drs. Laurence H. Kyle, Leonard A. Erdman and Marcus Schaaf.

"Comparison of the Hemodynamic Effects of Hexamethonium and Apresoline in Man," Drs. Edward D. Freis, John C. Rose, Edward A. Partenope and Frank A. Finnerty, Jr.

"Veratrum Treatment of Toxemia of Pregnancy: A Controlled Study," Drs. Frank A. Finnerty, Jr., and George J. Fuchs.

"Cerebral Hemodynamics and Metabolism of Diabetic Subjects," Drs. Joseph F. Fazekas, Alice N. Bessman and Nicholas J. Cotsonas, Jr.

"Clinical Application of Measurement of Body Composition by the Specific Gravity Technic," Drs. Paul D. Doolan, Walter C. Welham and Laurence H. Kyle.

Drs. John Parks, Robert J. Coffey and Brian B. Blades took part in the **Sectional Meeting of the American College of Surgeons** in Boston, March 2–5. Dr. Parks, who is Professor and Executive Officer of the Department of Obstetrics and Gynecology, George Washington University School of Medicine, presented a paper on "Myomatous Uterus Complicated by Pregnancy" at a Gynecological Symposium on Management of Patients with Uterine Fibroids, March 4. The following day he collaborated in a Panel Discussion on Management of Bleeding in the Third Trimester of Pregnancy.

Dr. Coffey, Professor and Director of the Department of Surgery, Georgetown University School of Medicine, participated in a Panel Discussion on Pancreatic Surgery, March 5. Dr. Blades, who is head of surgery at George Washington, presented his stereoscopic motion picture film on "Mediastinal Tumors."

The District of Columbia Dental Society held its **21st Annual Postgraduate Clinic** at the Shoreham Hotel, March 15–18. Several members of the District Medical Society took part in the scientific program. Dr. Ralph L. Morrison and Dr. Henry F. Capozzella participated in table clinics, and Dr. Robert U. Cooper, in a Panel Discussion on Looking Forward in Dentistry Today. Dr. Arthur Dick, Consultant in Plastic Surgery, Georgetown University School of Dentistry, discussed "Congenital Malformations" in a Panel on Children's Dentistry. Dr. Dick also presented a scientific exhibit on "Problems in Maxillo-Facial Surgery." A film on "Treatment of Fractures of the Mandible and Facial Bones by Open Reduction," prepared by Dr. Karl Hayden Wood, was shown. Drs. Morrison and Wood, dental surgeons, are Associate members of the Medical Society.

The Washington Psychiatric Society held a joint meeting with the Maryland Psychiatric Society, March 25, in the Medical Society's auditorium. Winners of first and second place in the Society's recent Prize Essay Contest for resident physicians in psychiatry presented their papers at this meeting. Captain Douglas B. Price, MC, USA, received the $100 cash award for his essay on "Denial of Mutilation and Castration Anxiety in the Amputee." Dr. John M. Bellis, for his paper, entitled "Toward a Biological Concept of Anxiety, with Particular Reference to the Theories of William Reich," was awarded a certificate of merit for second place. Dr. Robert T. Morse, Chairman of the Awards Committee, reported that a number of excellent papers were submitted for consideration in the essay contest.

The Section on Pediatrics changed its scheduled meeting date to March 24. The guest speaker was Dr. George M. Wheatley, Chairman of the Committee on Accident Prevention of the American Academy of Pediatrics. Dr. Wheatley spoke on "Accident Prevention in Childhood."

The Section on Neurology and Psychiatry met in the Medical Society's Library, March 5. Following a paper on "Recent Advances in Electrotherapy" by Dr. G. Hirschfield and a movie on "Non-convulsive Therapy," discussion was led by Dr. Paul Chodoff.

Dr. Joseph J. Bunim, Chief of the Arthritis and Rheumatism Branch of the National Institute of Arthritis and Metabolic Diseases (PHS), addressed the **D. C. Rheumatism Society,** March 12, on "The Critical Evaluation of the Use of Cortisone in Rheumatic Fever and Rheumatoid Arthritis."

The Jacobi Medical Society held its annual banquet at the Hotel Statler, March 16, in the Presidential Ballroom. Presiding at the dinner was Dr. Daniel Sondheimer, who introduced the guest speaker, The Honorable John Sherman Cooper, Senator from Kentucky and former U. S. Delegate to the General Assembly of the United Nations. Senator Cooper spoke on "The United Nations—Help or Detriment to United States Policy."

The Clinico-Pathological Society held its meeting, March 17, at the home of Dr. J. Ross Veal. Dr. Alva D. Daughton presented a paper on "Idiopathic Pulmonary Fibrosis."

Dr. James Q. Gant was recently elected President of the Baltimore-Washington Dermatological Society. **Dr. Jack L. Derzavis** continues as Secretary-Treasurer.

Dr. Wallace M. Yater, President of the Medical Society of the District of Columbia, was one of six Georgetown University alumni honored at the third annual Awards Luncheon of the Georgetown Alumni Club, held at the National Press Club, March 17. The awards were made for "distinguished service rendered to our country, our city, and our alma mater." Dr. Yater is founder and Director of the Yater Clinic. He was Professor and Director of the Department of Medicine at Georgetown University School of Medicine from 1930 until he resigned in 1945.

Similar awards were made to Richard P. Butrick, United States Consul in Montreal, formerly Director General of the State Department Foreign Service; J. Mark Trice, Secretary of the United States Senate; Thomas A. Cantwell, President of Thomas A. Cantwell & Company; Dr. Francis J. Fabrizio, President-elect of the District Dental Society; and George Morris Fay, former United States Attorney for the District, now in private practice with the firm of Fay & Anderson.

Mr. F. Royce Franzoni, President-elect of the American Pharmaceutical Association, was awarded an honorary degree of Master of Pharmacy by the Philadelphia College of Pharmacy and Science, on Founders Day, February 23. Mr. Franzoni is Past President of the District of Columbia Pharmaceutical Association and an Associate member of the District Medical Society.

Dr. Samuel M. Dodek has been appointed to the Editorial Council of the *American Journal of Proctology* as an adviser in the allied field of gynecology. The *American Journal of Proctology* is the official publication of the International Academy of Proctology.

Dr. Alan R. Crain gave a case report on "Low Back Pain" at the meeting of the **Louis Mackall Medical Society,** March 19. The meeting was preceded by dinner at the Kennedy-Warren.

Rear Admiral Lamont Pugh, Surgeon General of the Navy, spoke on "Navy Dentistry Afield" at the 70th Annual Convention of the Minnesota State Dental Association, February 25, in Minneapolis. Returning to Washington by way of Chicago, he was the principal speaker at the "kick-off" meeting, February 26, for the 1953 fund-raising campaign of the Chicago Chapter of the American Red Cross. His address, entitled "Those Two Lamps," recalled the movement started by Florence Nightingale and Clara Barton to "ease the misery and suffering of the human race throughout the world."

Dr. S. Arthur Linde was in Philadelphia, February 13 and 14, attending the Northeast Regional Convention of the International College of Surgeons. On the second day, in a Panel on Diseases of the Colon, he contributed a paper on "Diverticulitis."

Dr. Laurence H. Kyle, Associate Professor of Medicine, Georgetown University School of Medicine, presented a paper entitled, "ACTH and Cortisone in Surgery" before the same meeting, February 13.

Dr. Harold Jeghers, Professor of Medicine, Georgetown University School of Medicine, spoke on "Present Status of Leptospiral Infections in the United States" at a staff meeting of the Pratt Diagnostic Hospital in Boston, Mass., January 23. He also gave the same talk before the house staff of Boston City Hospital.

Dr. Calvin T. Klopp, Director of the George Washington University Cancer Clinic, was guest lecturer for the Seminar, March 10, one of a series sponsored by the National Cancer Institute. Dr. Klopp spoke on "The Use of Antibiotics in Cancer Therapy." Dr. Robert R. Smith was chairman of the meeting.

Dr. Roland B. Scott, Head of the Department of Pediatrics of Howard University School of Medicine, was awarded a certificate by the Student Council at its annual banquet, February 13, in recognition of his 13 years of "meritorious service" as a member of the teaching faculty.

Dr. Scott, a diplomate of the American Board of Pediatrics, was recently certified as a specialist in allergy by the same Board. He spent the year 1950 in postgraduate study of allergic diseases at the

Institute of Allergy, Roosevelt Hospital, in New York City.

Dr. Scott has been reëlected for a 3-year term to the Board of Directors of the National Medical Fellowships, Inc. The function of this organization is to provide financial aid in the form of fellowships for needy young Negro physicians who are pursuing postgraduate studies in the various medical and surgical specialties.

Dr. Edward D. Freis, Adjunct Professor of Clinical Medicine at Georgetown University School of Medicine, and Assistant Chief of Medicine of the Veterans Administration (Mt. Alto) Hospital, spoke before the Norfolk District Medical Society of Boston, Mass., February 24. His address was entitled, "The Treatment of Essential Hypertension by Blood Pressure Lowering Drugs."

Dr. George Tievsky was recently certified by the American Board of Radiology.

Mr. Harold C. Kinner, Secretary of the District Board of Pharmacy, was honored by his colleagues at a dinner given by the Alpha Zeta Omega pharmaceutical fraternity, March 12, at the All Nations Club. Mr. Kinner is also Executive Secretary of the District Pharmaceutical Association; he graduated in pharmacy from George Washington University.

Dr. Jackson A. Saxon, an Associate member of the Medical Society, is medical officer for St. George Island, one of the Pribilof Islands off the coast of Alaska. He will remain there about 15 months, serving 196 people, of whom 7 are white and 189 Aleuts.

He landed on the Island, February 14, with his wife and two sons, ages 3½ years and 21 months. At that time the ice was 5 feet thick at the wharf. Mail is received once a week, dropped from a low flying airplane. Mail can be sent out only once in two months.

Dr. Saxon took with him much camera equipment since photography is his hobby. He would be happy to exchange notes with any members of the Society who share the same interest. His address is: Dr. Saxon, Senior Assistant Surgeon, c/o Fish and Wildlife Commission, St. George Island, Alaska (via Anchorage and St. Paul Island).

Dr. Robert C. Hawkins II has moved from Washington to Toledo, Ohio. He can be addressed in care of the Toledo Clinic, 2001 Collingwood Boulevard, Toledo 2, Ohio.

Dr. John M. Baber is now practicing in West Palm Beach, Florida, with offices at 3632 South Dixie. He resides at 1012 Locust Street.

BOOK REVIEWS

Poliomyelitis: Papers and Discussions Presented at the Second International Poliomyelitis Conference. Compiled and edited for the International Poliomyelitis Congress. Price, $7.50. Pp. 555. Illustrated. Philadelphia: Lippincott, 1952.

This volume contains the papers presented at the Second International Poliomyelitis Conference held in Copenhagen, Denmark, in 1951. The papers deal with all phases of the disease from the diagnosis and treatment (medical and surgical) to its pathophysiology and ecology.

The papers and symposia are given by men of international reputation. Many deal with fundamental research. There is an excellent section fully describing the scientific exhibits which were presented at the conference. Diagrams, charts and photographs are used in profusion throughout the publications.

Thus, in one volume we have available a complete review of the progress made in the knowledge of poliomyelitis since the First International Congress held in 1948.

This book can be highly recommended for all those who have a particular interest in poliomyelitis.

DONALD H. MILLARD, M.D.

Nutrition and Diet in Health and Disease, 6th ed. JAMES S. MCLESTER, M.D., Professor of Medicine Emeritus, University of Alabama; AND WILLIAM J. DARBY, M.D., PH.D., Professor of Biochemistry and Director of the Division of Nutrition, Vanderbilt University. Price, $10.00. Pp. 710, with 14 figures and 145 tables. Philadelphia: Saunders, 1952.

The fact that this book is now in its sixth edition gives testimony of its usefulness to the practicing physician. The authors have assembled under one cover all of the important information about food and its utilization in the body.

The first half of the book reviews the normal mechanisms involved in the digestion and utilization of food. The latest opinions as to the optimum requirements of each individual food constituent is listed in detail. So much information concerning vitamins reaches the practicing physician through the visits of the drug house detail man that it is very refreshing to read an unbiased report on this important matter. This half of the book was entirely rewritten by Dr. Darby, the new co-author.

The second half of the book discusses the nutritional problems of those diseases in which diet is a factor. The broad clinical experience of Dr. McLester has given this section a personal touch that is missing from many modern textbooks. Where there is a difference of viewpoint on some controversial subject, both sides have been stated and then a conclusion drawn. The conservative viewpoint of Dr. McLester is very helpful at a time when so many rash claims are being made for the results of dietary therapy in such diseases as hypertension and arteriosclerosis. The chapter on diabetes includes a discussion on the new food exchange tables and how they simplify the dietary treatment.

The chief criticism of the book is that there is some duplication in the many tables and diets that are scattered throughout. In future editions these should be given closer scrutiny with the idea of deleting those that are not essential.

Every practitioner would do well to have this book in his reference library.

James M. Moss, M.D.

Operating Room Technic, St. Mary's Hospital, Rochester, Minn., 4th ed. Price, $6.50. Pp. 345, with 219 figures. Philadelphia: Saunders, 1952.

This book for operating room personnel and student nurses, now in its fourth edition, has been completely revised.

The technics used at St. Mary's Hospital are well presented, and would be of value to anyone who desired to follow their procedures. The explanations of the various operations and procedures are short and concise and easy for student nurses to understand. The illustrations of the instruments are good and the illustrations of operations and set-ups are very clear and helpful.

However, several subjects presented in previous editions have been deleted, making this book less comprehensive than its predecessors. Specifically, there is no mention of either the methods of sterilization or the use of sterilizing equipment. Very little is said about draping, positioning, scrub technic, set-up of tables and rooms, as well as care of instruments and supplies. The book does not mention anything about sutures and needles.

Altogether this book can be recommended as a useful adjunct to teaching of operating room personnel, but it is not comprehensive enough to serve as a principal textbook.

W. Leonard Weyl, M.D.

JESSE THOMAS MANN, M.D.
(1895–1953)

Dr. Jesse T. Mann, chief of staff in anesthesiology at Sibley and Columbia hospitals, died, February 14, 1953, in Sibley Hospital after a short illness. He resided at 408 Rolling Court, Chevy Chase, Maryland.

Dr. Mann was a Washingtonian, born, September 4, 1895, the son of Rodman T. and Mary H. Mann. He attended the public schools of Washington and graduated from Eastern High School. From George Washington University he received his degree in medicine in 1917. He took his internship and residency training at Garfield Memorial Hospital, with a short interruption in 1918 when he served as First Lieutenant in the Army Medical Corps during World War I.

CAT

Dr. Mann began general practice in the District of Columbia in 1919; six years ago he limited his practice to anesthesia. In addition to being chief anesthetist at Columbia and Sibley hospitals, he was consulting anesthetist at Garfield and Children's hospitals.

Dr. Mann was elected to Active membership in the Medical Society of the District of Columbia in 1920. He served on many committees of the Society and on the Board of Censors from 1944 to 1947. He was a member of the American Medical Association, the American Society of Anesthesiologists, and the International Anesthesia Research Society. Dr. Mann also belonged to the Phi Chi fraternity, the Masons, and was a member of the official board of the Chevy Chase Methodist Church.

He is survived by his wife, Mrs. Thelma Davis Mann; a son, Richard T. Mann, 7104 North 27th Road, Arlington, Va.; a daughter, Mrs. Betty Lou Carlton, 4507 Avondale Sreet, Bethesda, Md.; and three sisters, Mrs. Ruby Owens, Washington, and Mrs. Bertha Sharp and Miss Mary O. Mann, both of Chevy Chase, Md.

CHARLES A. GOETTLING, M.D.
(1887–1953)

Word has just been received of the death of Dr. Charles A. Goettling, an Associate member of the District Medical Society, on January 30, 1953, at Middleburg, Virginia.

CAT.

Dr. Goettling was born in Baltimore, Maryland, April 12, 1887. He received his degree in medicine from the University of Maryland in 1910 and interned at the University Hospital in Baltimore.

Dr. Goettling affiliated with the District Medical Society in 1932 as an Associate member, when he was practicing medicine in Aldie, Virginia, and retained his membership in the Society until his death. For many years he maintained an office in the District of Columbia but his residence and main office were always in Virginia.

Subdural Effusions in Infancy—Stevens and Williams

(*Continued from page 174*)

is subdural effusions, which usually occur in infants less than 1½ years old following meningitis, usually due to *Hemophilus influenzae* or *Diplococcus pneumoniae*. No single diagnostic criterion is reliable, but the history of any meningitis should arouse suspicion, particularly if the child's physical and mental development is not progressing. Subdural taps are the *sine qua non* in such a condition and are considered safe and simple. If subdural fluid persists, it may be inferred that a constricting membrane has formed, necessitating surgical removal in most instances. Morbidity from this membrane may be grave. In addition to meningitis as a cause of subdural effusion, the clinician should be alert to the possibility of such effusion occurring in cachectic children, e.g., with chronic severe diarrhea. The treatment is the same.

The mechanism for the production of subdural effusion is discussed.

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THE USE OF BENZOTROPINE SULFONATE IN THE TREATMENT OF PARKINSONISM*

DESMOND O'DOHERTY, M.D.
Research Fellow in Neurology, Georgetown University School of Medicine

FRANCIS M. FORSTER, M.D.
Professor of Neurology, Georgetown University School of Medicine

THE therapy of parkinsonism is a distinct challenge to neurologists. This is a syndrome which has become of great importance during the past 30 years. The pandemic of influenza at the close of the second and beginning of the third decades of this century was associated with widespread encephalitis. The most common lasting sequel of this polioencephalitis is parkinsonism of the postencephalitic type. While fortunately, there have been no great epidemics of encephalitis in recent years, and the endemic cases have been relatively few, the progressive increase in the average age of the population has brought more and more people within the severe arteriosclerotic range and hence has produced an increase in the arteriosclerotic type of parkinsonism.

Unfortunately the therapy of parkinsonism is still in the empiric phase. The neurophysiology of the basal ganglia is still not sufficiently well understood; neuropharmacology is as yet an infant science; and neuropathology, because of the diffuse nature of both encephalitis and arteriosclerosis, has not yielded its usual precise knowledge here. For these reasons we must still, albeit regretfully, pursue empiric methods in therapy.

In 1874 Charcot[1] introduced belladonna therapy in this syndrome. Whole belladonna preparations and components of the belladonna as hyoscine have been the mainstay of therapy. In the late 1930's and early '40's Bulgarian belladonna therapy was in particular vogue. At first it was felt that belladonna from Bulgaria presented a particularly efficacious preparation, but soon it was realized that the chief advantage was the extension of dosage to barely subtoxic doses. More recent acquisitions to the atropine series are syntropan, panparnit,[2] and artane.[3]

Antihistaminic drugs, particularly thephorin and benadryl,[4] reportedly have been of some value in the treatment of parkinsonism.

Since the atropin series has long been known to include the most efficacious anti-parkinsonism drugs and since antihistaminic drugs appeared to offer some promise in therapy, it was quite natural to attempt to combine the 2 chemical groups. The chemists of Merck and Company succeeded in this interprise, producing a preparation known by its experimental number MKO-2, or benzotropine sulfonate. Chemically this is benzohydryl ether methane sulfonate. We are indebted to Merck and Company for making this preparation available to us, and the following is our preliminary report on the use of this medication.

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* Read before the Section on Neurology and Psychiatry of the Medical Society of the District of Columbia, May 1, 1952.

MATERIAL AND RESULTS

All observations were made on patients in the outpatient clinic of the Neurology Department, and the patients were under the continuous observation of one or both of the investigators. The total number of patients was 24. Of these 24 patients, the parkinsonism in 10 was due to arteriosclerosis and in 14 was postencephalitic in type. The parkinsonian syndrome was bilateral in all patients but more marked on 1 side in 6 cases. Tremor and rigidity were symptoms common to all 24 patients, but in 10 patients tremor was the more prominent complaint; in 7 patients tremor and rigidity were equally incapacitating. Oculogyric crises occurred in 3 patients. One patient was bedridden, 6 patients were able to be up and about but incapacitated in so far as useful activity was concerned. Fourteen patients were able to carry on minor useful activities, and 3 patients were able to continue their usual activities.

MKO-2 was administered to these patients in tablets containing 0.5, 1.0 or 2.0 mg. Total dosage per patient varied from 1.5 to 6.0 mg. per day. No other medication was administered at the time of MKO-2 therapy. The patients have been followed for periods ranging from 3 to 12 months on this régime.

Six of the 22 patients comprising this group had received no anti-parkinsonism therapy prior to the administration of MKO-2. Eighteen of the patients had previously received other medications. These prior medications were belladonna in 4 cases, stramonium in 9 cases, hyoscine in 4 cases, benzedrine in 2 cases, panparnit in 1 case, artane in 11 cases, benadryl in 4 cases, and tolserol in 6 cases.

The results of therapy were considered excellent when therapy enabled them to perform activities previously impossible. One patient was able, for the first time in a year, to get out of bed and feed herself. Another patient could hold a book steadily enough to read. Still another patient was able, for the first time in well over a year, to dress and undress himself without help. The moderate improvement group (M.I.) included those whose performance improved but unspectacularly. Improvement of slight degree was noted as fair (F) and no improvement as poor (P).

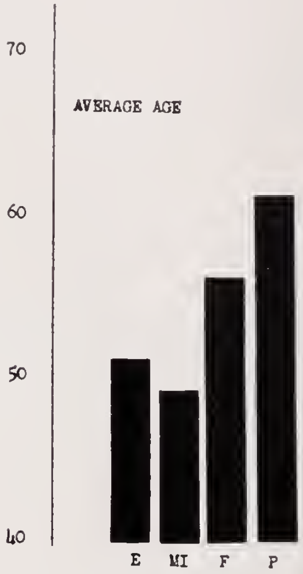

FIG. 1. Results according to age at time of treatment.

No patient could be classified as recovered while under treatment with MKO-2. However, 3 patients showed great improvement (E), 14 showed moderate (M.I.) to slight (F) improvement, and 9 represented moderate and 5 fair improvement. Seven failed to improve (P). In no patient was the Parkinson's syndrome made worse by MKO-2.

Evaluated according to age, patients in E and G classifications averaged 7.6 years younger than those in the F and P groups (figure 1). The oldest patient was 71 and the youngest 39 in the former, and 77 and 47 in the latter, showing a tendency to better results in inverse ratio to age.

Of the 14 patients classified as postencephalitic, improvement was 78.5 per cent as compared to 60 per cent in the arteriosclerotic group (figure 2).

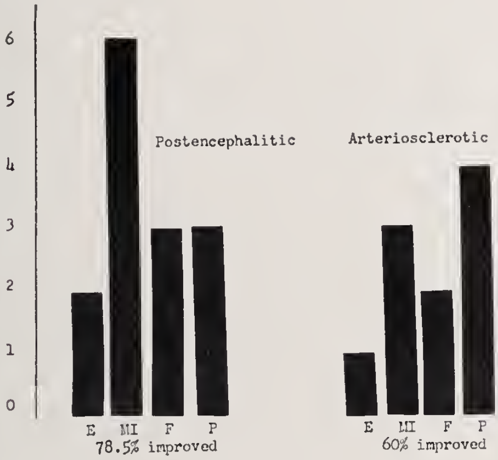

FIG. 2. Comparison according to type.

When the tremor was the most annoying symptom there was 80 per cent improvement as compared to only 58.3 per cent in those with rigidity and 61 per cent in those in whom tremor and rigidity were equally severe (figure 3).

There was no significant improvement in relation to sex and race. There was a slightly better response in previously treated patients than in those who were on their first medication, but the number of untreated cases was less than one quarter of the total, hence not statistically significant.

TOXICITY

In general, those patients whose previous medication had produced the toxic symptom of atropinism found that MKO-2 in equivalent doses did not produce blurring of vision, dryness of the mouth, constipation, or nausea. Symptoms were minimal in 4 of the 5 previously untreated cases. In 2 patients symptoms of atropine toxication appeared. These included visual hallucinations, dilatation of the pupils, severe dryness of the mouth, and constipation. MKO-2 was discontinued completely, and the symptoms disappeared completely. These were early mild cases of parkinsonism and as such undoubtedly had less tolerance to the atropine effect of the medication. Numbness of the fingers was present in 2 cases and could be controlled by lowering the dosage of MKO-2. In 1 of these cases the numbness had occurred with other drugs as well. Neurologic examination revealed no objective evidence of peripheral neuropathy or myelopathy.

It remains to evaluate the duration of effect, since the present study was too short to give exact information on this point, but no patient in this series developed a tolerance to MKO-2.

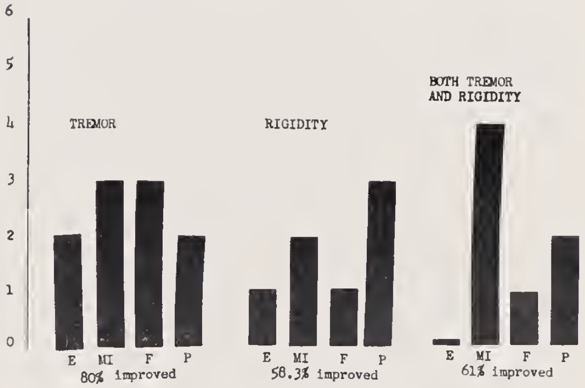

FIG. 3. Comparison of results according to prevalent symptom.

CONCLUSIONS

MKO-2 is an effective agent in treatment of parkinsonism, comparing favorably with previously tried medications and showing a tendency to be more effective in the more stubborn cases. Toxic effects are less, at comparable doses, than with other atropine drugs.

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POISONING FROM CARBON TETRACHLORIDE USED IN REMOVING ADHESIVE TAPE FROM THE SKIN

B. L. HARDIN, JR., M.D.

Associate in Medicine, George Washington University School of Medicine

ALTHOUGH there are many cases reported in the medical literature of carbon tetrachloride poisoning, there are but few which have been due to the inhalation of carbon tetrachloride used in removing adhesive tape from the skin.

An article[1] in the *American Druggist* in 1934 describes the case of a 2½-year-old child who became drowsy and stiff 2 days after its mother had removed adhesive strips from a scalp wound 3 days old. The child was taken to a hospital, where stupor gave way to coma. Laboratory tests were apparently negative except for a slight trace of albumin in the urine. Meningitis and brain hemorrhage were considered, and the skull opened but no hemorrhage found. Convulsions, dysphagia, and shallow respirations preceded death, which occurred on the third day following the removal of adhesive from the scalp wound by means of carbon tetrachloride. Autopsy showed edema of the brain and such a severe necrosis of the liver that it was almost completely destroyed.

Chandler[2] in 1936 reported the case of a child aged 4 who, following the removal of adhesive by carbon tetrachloride from some dressings applied to her back as she lay prone in bed, suddenly collapsed, her respirations ceased, she became pulseless, and death seemed imminent. Complete recovery occurred after 5 minutes of artificial respiration.

That carbon tetrachloride, like its near relative, chloroform, can cause severe central necrosis of the liver has been known for a good many years.[3] That it can cause sudden death has been known for an even longer time.[4] Geiger[5] believes that sudden death from carbon tetrachloride is due to ventricular fibrillation.

Perhaps the most typical kind of carbon tetrachloride poisoning is that of lower nephron nephrosis.[6] It has been thought for some time that the renal injury is more important than the liver injury.[7] The case here reported is a typical instance of lower nephron nephrosis. Not only is it interesting because it was caused by the removal of adhesive plaster but also because, even though several physicians saw the patient and considered carbon tetrachloride as a possible etiologic factor, none of them thought it was the cause of her nephritis until she began to get well.

REPORT OF CASE

E. J. H., aged 52, a white married woman, weighing 110 lb., on September 29, 1951 drank 3 ounces of whiskey about 6 p.m., had supper at 6.45 p.m., and at 10 p.m. entered a bathroom with closed door and window and proceeded to remove adhesive strapping from her right chest, using about 4 ounces of carbon tetrachloride. (Her fourth rib had been fractured on September 4, and a doctor had strapped the right side of the chest on September 15.) During the procedure she felt dizzy for a minute or two. On September 30 anorexia and nausea were present. On October 1 anorexia, nausea, and vomiting made her call the doctor. She gave a history of having had a similar attack for 3 or 4 days in 1944. She had had such allergic manifestations as rose fever and eczema in childhood. Her temperature was 99°F., the pulse rate 84, and the blood pressure 120/75. She did not appear ill. There were a few crepitant rales at the lung bases, and the edge of the liver was questionably palpable and slightly tender. A tentative diagnosis of cholecystitis was made. The same symptoms continued on October 2, and I wondered whether I felt her liver or her gallbladder. On October 3 she felt better; I wondered if the mass in the right upper quadrant of the abdomen was kidney. The leukocyte count was 9,350 with 95 per cent neutrophiles and 5 per cent lymphocytes. The urine showed a heavy trace of albumin, the quantity was insufficient for specific gravity, no sugar was present, and microscopically there were 10 white blood cells per high power field and a very occasional red blood cell. On October 4 she continued better, but the urine showed a specific gravity of 1.005, a trace of albumin, and a very occasional red blood cell. On October 5 she again became nauseated, the mass in the right upper quadrant of the abdomen was again considered to be the kidney, and although the liver was not felt, some tenderness was present over the gallbladder area. The temperature was 98°F., the pulse rate 56, and the blood pressure 120/70. A urine concentration test showed in 3 specimens specific gravities of 1.008, 1.007, and 1.005.

Since constant albuminuria and a low specific gravity hardly rhymed with cholecystitis, she was admitted to the hospital on October 7. Nausea and vomiting disappeared. On October 9 she stated that during her week's illness at home she had gained 5 lbs. in weight, which struck her as being most extraordinary since she had eaten hardly anything. Her face was discovered to be swollen, and mild pitting edema appeared in her legs and feet. A subconjunctival hemorrhage was noted in the right eye. Both eyegrounds were normal. I was amazed to find the blood nonprotein nitrogen 113 mg. per cent. On October 10 a phenolsulfonphthalein test gave only 6 per cent excretion in 2 hours, and the highest concentration of urine was 1.008. Her blood pressure, which had been normal, rose to 160/90, and the face became more edematous. A tremor was noted in the pectoralis muscle near the axilla, and there were a good many rales at the bases of the lungs. (It is unfortunate that during the first hospital days the urinary output was not noted because of nursing difficulties.) A diagnosis of chronic glomerular nephritis was made, and a poor prognosis given to the patient's husband. On October 11 a medical consultant saw the case. Carbon tetrachloride poisoning was considered but discarded and the same diagnosis of nephritis made.

By the beginning of the second week in hospital, October 14, her weight had increased from 110 lbs., her normal weight, to 122 lbs. The hemoglobin was 66 per cent, the red blood cells numbered 3,170,000, and the white blood cells 8,750, with 77 per cent neutrophiles. There were more rales in the lungs, and there was a question of ascites, but the blood nonprotein nitrogen had gone down from 113 to 95 mg. per cent. A urologist on October 16 thought that a chronic glomerular nephritis had been aggravated by the inhalation of carbon tetrachloride. He thought a ptosed right kidney was present. Polyuria began at about this time and was increased on October 17 after serum albumin was given intravenously. By October 18 the edema had almost disappeared and the nonprotein nitrogen was 87 mg. per cent. A bromsulfalein test of liver function gave a 14 per cent retention, and a cephalin flocculation test was 2 plus, showing some liver disease as well, though no jaundice was present and the serum bilirubin was normal. By October 22 the subconjunctival hemorrhage had disappeared, as also the basal rales in the lungs, but the white blood cell count had reached a peak of 14,820, with 76 per cent neutrophiles, 13 per cent lymphocytes, 8 per cent monocytes, and 3 per cent eosinophiles. The highest blood pressure was 175/90, on October 24. Along with the loss of edema consequent upon the polyuria the weight dropped from a peak of 122 lbs. to a low of 105 lbs. by the time of discharge on November 5. There was a moderate acidosis during the height of the illness (CO_2 combining power 39 vol. per cent) but no retention of potassium or chloride (potassium 23 mg. per cent and chlorides 610 mg. per cent). Although the phenolsulfonphthalein test of the urine had returned to normal (60 per cent in 2 hours), the urine concentration test remained abnormal[8] (specific gravity not over 1.012). The blood nonprotein nitrogen was 38 mg. per cent and the blood pressure 120/75. Electrocardiogram and X-ray films of the chest and abdomen were all normal. The sedimentation rate was elevated (25 mm.) at the time of admission and also at the time of discharge. The blood count returned to normal except for a moderate leukocytosis. The patient remained in the hospital from October 7 to November 5, 30 days, and was in good condition except for being about 6 lbs. underweight when she went home.

DISCUSSION

In an attempt to stimulate urination in the presence of oliguria or anuria too much fluid is often given to patients with lower nephron nephrosis. Fluid intake in the present case was not restricted enough. The idea is widespread that these patients are often drowned to death by being given more fluid than the kidney can excrete. Unless they lose fluids by vomiting or diarrhea they should not be given more than 1,000 c.c. daily. Since the human body can live for many days without urinating, today's treatment of lower nephron nephrosis of whatever etiology is to limit fluids and await the return of function of the kidney tubules rather

(*Continued on page 277*)

UNORTHODOX WORKING CONCEPTS FOR PSYCHOTHERAPY*

D. EWEN CAMERON, M.D.

President, American Psychiatric Association; Director, Allan Memorial Institute of Psychiatry, McGill University

WHEN I was asked to talk before the Washington Psychiatric Society I began to think of all the bright, the daring, and the contentious things which, from time to time over the last several decades, have been launched by the psychiatrists working in this area. I shall not mention them by name. It is a curious, indeed, entrancingly paradoxical thing that the more contentious a man's viewpoint, the more he hopes to see it established, accepted and thus institutionalized into respectability, no matter if that should prove dull. But the record which you have established for enterprise has encouraged me to talk to you about some of our working concepts in psychotherapy. I think that you will agree (and this may well be our last point of agreement) that this is one of the most contested fields in our rapidly and tumultuously growing science of psychiatry.

It is at once extremely rewarding, puzzling and demanding. Nothing can be more satisfying to the therapist than to see the extraordinary reorganizations in personality which may take place once a patient has grasped, for instance, that much of his deviant behavior is based upon the dynamics of negative identification, or once the hitherto passive spinster has succeeded in asserting herself against her dominant and domineering mother.

Nothing is more puzzling than to determine how these changes come about; and nothing demands more of the therapist than the intellectual effort which he must maintain if he is to manipulate successfully these highly abstract data. The reward, the puzzle, and the demand conspire to place the therapist in what often amounts to a major frustrating situation.

Now, one of the ways to escape from situations in which we are highly motivated to participate and to succeed, but in which we cannot be sure of success, is to take refuge in a defence by substitution. Instead of attempting to deal with the threateningly frustrating matter, one deals with a parallel but simpler problem. And may I suggest that this is what a number of us are doing with respect to psychotherapy, many of us on occasion, others habitually.

The escape to which I refer is the preoccupation with procedure and dogma and not with the patient. Concerned about this, I have ventured to base my talk tonight upon an unkind attempt to break through this defence and thus expose ourselves again to the reward, the puzzle, and the demand.

It is, of course, extremely easy for us to take refuge in orthodoxy; the petrification of promising propositions is a continuous process. Suppose we look at this common course of events. Let us imagine that a new set of propositions has been put forward in support, let us say, of the concept of telepathic communication as a factor in psychotherapy. Their first breath of life may well be given to them by an individual; but whether they will continue to draw their second, third or fourth breath depends increasingly upon social factors. Suppose we continue our postulation concerning our original set of premises a little further and state that they are going to be successful. One now sees them spread to an increasingly large number of people; variations are set up, which for awhile may be endured, in the thus far loosely organized field of telepathic therapy; but soon the original group of individuals who identified themselves with the new premises, come to develop a proprietary attitude toward them. They insist that novitiates should be properly instructed; that practice must be carried out in a certain way, preferably under guidance and supervision; that wildcat telepaths are to be driven from the therapeutic field. Thus, quite rapidly, perhaps in a decade or so, we pass from a time when the original premises were quite revolutionary to a time when they have begun to show quite considerable institutionalization and have become orthodox. Beyond this point the original premises begin to act to an ever-increasing degree as deterrents to further development; and it becomes the task of those concerned with the progress of the discipline to seek ways of overturning these institutionalized conceptions.

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* Delivered at the Annual Meeting of the Washington Psychiatric Society, January 16, 1953.

Here let me point out an additional hazard to which original concepts appearing in our field are particularly likely to fall victim. Major conceptions in our field depend to an unusual degree upon the basic premises of our culture. To the extent that premises of science are now a part of our culture, we may point to the enormous amount of time spent by workers in our field in quite vain attempts to duplicate the procedures of experimentalists in the physical sciences—the setting up of presumed normal controls, the assembling of a series of so-called typical cases. All this despite the fact that we are working at a level at which adaptiveness is so intense that the very event of reaction inevitably changes the reactivity of the phenomenon under consideration, and where every phenomenon with which we work is so complex that it is most reasonable to term it unique. At the same time, neither our premedical nor our medical training seems to take much stock in, or even be much aware of, the importance of basic premises and the enormous biases and blockages which they impart to our thinking. The result of this neglect is that some of the most original and brightest of ideas are often set up in a framework of basic premises which were already obsolescent at the time and have since become quite invalid, and hence the effectiveness of our original ideas is undermined at the very time when they should be reaching their maximum effectiveness. It is a little bit like installing modern toilet arrangements in a hillbilly shack: those connections vital to continued, efficient operation are, of necessity, missing.

It has always seemed to me that neither of these two hazards is inevitable—neither the sterilization of institutionalization, nor the unpleasing (and ultimately unfruitful) fact of the young, bright idea wedded to a senescent basic premise.

Without further preamble let me then go forward to state some of the basic premises which I have found most useful in thinking about therapy and, after this, put before you a few of the derived working concepts which seem to me to be particularly promising.

The premise I should like to touch upon first of all is undoubtedly the most fundamental of all, namely, that we have moved away from thinking about our problems in terms of absolutes to thinking about them in relativistic, operational terms. Hence one must say goodbye to the idea of an absolute scientific truth and welcome, rather, a series of conceptions lying in a gradient of validity, this gradient being determined by their operational effectiveness. At the same time, this allows me to say that when I criticize some ongoing conception, I criticize it not on the grounds that it constitutes absolute error but, rather, on the grounds that it is less effective than others which we now possess. This basic premise of relativism versus fundamentalism, which I have so lightly tossed off in a few sentences, is one which of course has widest possible repercussions in our thinking. It raises difficult questions concerning the transfer of concepts from one case to another, and it undermines the dicta concerning the criteria of proof which the physical scientists have so carefully and, for them, effectively worked out.

Moving away from this particular idea, let us in passing "take off our hats" to one of the very few basic premises which have succeeded in getting themselves recognized; namely, the ancient Aristotelian law of the excluded middle, presenting itself in our field in terms of the dichotomy. While no one can claim that we have finally found a way of thinking without using the dichotomy, we are still, nonetheless, on the move toward this desirable goal.

I would like to spend a moment or two in stressing a third, namely, our conceptions of causality—of how events are linked one to another. Here I am quite certain that we are making only limping progress; and if you examine some of even the most revolutionary of our ideas, you will find that they are often enough tied up to the very old deterministic idea of causality, and hence we continue to look for original causes and to expect to find specific remedies for specific disorders.

Therapy set up on the older ideas of causality was always "causal" therapy. One sought the original cause and looked, as indicated earlier, for specific remedies; until one had got the original cause and the specific remedy, one's search for absolute truth was not done. In contrast, the newer premises concerning causality allow one to interfere wherever it seems profitable.

Here we begin to take what no doubt seem to 19th century reasoners to be cheating shortcuts—we seem to be breaking the rules of the game that were set up by their great men of science. We may fortify ourselves against these complaints by seeing them as the age-old outcries of the institutionalized against the innovators Illustrating the degree of freedom which these newer premises concerning causality give to us, we may say that where a patient is suffering from hysterical vomiting, we can, guided by the light of these new premises, see that it is quite reasonable to give, along with psychotherapeutic assistance, intravenous dramamine. If the suppression of this symptom would seem to throw fresh stress on the individual, that is a problem which should be assessed in itself. But the idea of giving up the treatment of a symptom because you do not know the original cause is ridiculously doctrinaire. Similarly, the avoidance of sedation in anxious patients who cannot sleep because one does not know the cause of their anxiety is unrealistic.

Passing on from there, one can attack the idea of the inferior nature of symptomatic treatment, as contrasted with so-called causal treatment. This is the perseveration of a very old idea, namely, that a thing and its qualities can be separated. In reality, the difference between what is called a symptomatic recovery and what it is not quite respectable to claim, namely, a cure, can be much more soundly stated in terms of a continuum. Ordinarily, an individual who shows what is termed a symptomatic recovery is somebody whose reorganization has gone to the point where, under certain circumstances—either in hospital, on ambulatory therapy, in a particularly favorable home situation—he is able to get along without evidence of maladjustment, but who, because his reorganization is limited, will again show symptoms whenever he is exposed to any save these particularly favorable circumstances. The curious, and hardly ever claimed, condition of cure may be said to be one in which the reorganization is so far-going that the individual's capacity for adjustment has now reached a level of effectiveness similar to that enjoyed by most of his fellows; in other words, only quite severe stresses and difficulties will produce symptoms.

The newer approach to therapy is relativistic, elastic and plastic. The old is doctrinaire, essentially fundamentalistic and deterministic. I have touched briefly on certain of the basic premises with which it seems to me we have to concern ourselves in approaching the further evolution of our psychotherapeutic procedures. I have touched briefly on the matter of fundamental versus relativistic truth, on the extraordinary penetration of our thinking by the Aristotelian law of the excluded middle; I have also touched upon the rapid developments which have taken place in our ideas of causality.

Let me pass on from here to a discussion of certain ideas concerning therapy which perhaps may at present be considered unorthodox. One of the first of these ideas which I should like to put before you concerns the relation of knowledge to power. We are long familiar with the truism that knowledge is power. But I would like to invert this statement and say that there is also a great deal of truth—and here, naturally, I mean operational value—in the statement that power is knowledge. This might seem rather an odd kind of statement, but I am sure that those of you who have thought about this will go along with me quite a distance in recognizing that if you increase the power of the individual, he will very often find new ways of dealing with his problems. And, as a natural derivative of what I said a little earlier concerning causality and causal sequences, it doesn't seem to me to matter too much how you go about increasing his power. In psychotherapy, of course, one of the simplest of ways is in terms of strengthening the patient-therapist relationship. One of the main functions of the therapist is to assist in the building up of power in the patient. But even where a relationship is not with a therapist, all of us recognize that the establishment of a relationship with someone else serves to increase the powers of both. Anxiety is differently and often more effectively controlled. The individual who has a limp or a facial disfigurement is not nearly so shy about meeting others if he can do so in the company of a friend.

Recently I worked with a patient who suffered from the late effects of a poliomyelitic involvement of her right leg. If she walked down the street alone, she felt that other people were looking at her, were criticizing her and, in general, had beliefs that people were talking about her in an unfriendly way, beliefs so strong and at the same time so unrealistic as to amount to transient delusions. If she walked with a friend, this was no longer the case. In other words, she conceptualized her relations with others differently if her power was augmented by means of a close association with a friend.

There are now a number of interesting experiments going forward in increasing the power of the individual by using a variety of biochemical and endocrinological agents. We have for several years now made use of testosterone as a means of building up the confidence of individuals having low frustration tolerance, and building this up particularly at the point when they are going to go home. Also for several years we have found it very useful, somewhere in the course of a long period of psychotherapy during which an enormous amount of data has been brought out by the patient but has not been well synthesized by him, to give such an individual an intravenous dose of desoxyn or pervitin. The immense feeling of confidence which ensues for the next several hours quite frequently suffices to allow the individual to synthesize what was previously a large assortment of poorly integrated recollections and conceptions. Very often you will find such patients saying, while under pervitin, "I can see the thing now, at last; I can see it quite plainly; I never had this grasp of the situation before."

Now, I am sure that those among you who either consciously or (more probably) unconsciously are profoundly influenced by 19th century determinism will say: "Aha! And what happens when the pervitin wears off?" May I reply to you, again in such simple terms, and say: "Aha. When it wears off, you do not get the same situation again." In dealing with the living organism you are dealing with a continually emergent situation and, as often as not and sometimes oftener, the newly established conception has, within this short period of time, developed sufficient durability, has developed sufficient powers of inhibition, to prevent the reëstablishment of the less effective blueprints which previously had governed his behavior.

How far this conception that power is knowledge can be put to use in psychotherapy leads to a number of fascinating speculations.

Here is another unorthodox idea which we have found useful in the last year or so, and which, I dare say, with further work could be made to furnish still other valuable applications. And that is that, instead of attempting to differentiate anxiety and hostility and guilt and various other sweeping involvements, it is also useful to attempt to state and emphasize their common factors with a view to determining whether methods of managing the one may not be useful in managing the others.

In this list of booster responses—of the great intensifications of human behavior which come into action where special demands are made on the organism—I would include tension, anxiety, depression, hostility, excitement, guilt, the sexual response and, possibly, the pain response. Let us look for a moment at what they have in common.

1. They are all total responses; the organism responds as a whole and responds in an intense manner.

2. The capacity for these responses is inborn.

3. The cues which elicit them are learned, at least in part. This is true even of the pain response, as is well illustrated by the effects of lobotomy.

4. Their relationship to the effectiveness of the individual is parabolic, namely, that, when they are present in mild degree, the effectiveness of the individual is not at its highest pitch; as they increase in intensification to a certain point, so does the effectiveness of the individual, as, for instance, may be seen in the effects of anxiety upon learning. Beyond a certain point, however, a further increase in intensity results in a steady decrease in the effectiveness of the individual.

5. They all have a compulsive quality, that is, once they have increased beyond a certain point, all other considerations apparently yield to them.

6. They all possess powerful inhibitory as well as facilitative components; that is to say, while they are in full swing other activities tend to be inhibited.

7. They are all prone to cause impairment of the organism in the following ways common to all: (a) exhaustion, (b) disorganization, (c) overgeneralization of the cue, (d) fixation of developmental processes, and (e) setting up of autonomous responses.

8. They are all provided with defences by means of which the organism seeks to protect itself against the above-mentioned damaging effects.

Hence I would suggest to you that it might be valuable to think of these intensifications of human behavior in terms of their possessing a great deal in common and a few points of difference. Or, if you prefer it, to state that they can be viewed as consisting of a major general factor and a minor specific factor. There are several values, from the psychotherapeutic viewpoint, in looking at these intensifications of human behavior in this way. The first, and most obvious, is that it circumvents the old emotional versus intellectual dichotomization of behavior.

I think we are all quite dissatisfied with this. We all recognize that no purely emotional reaction takes place, and that every so-called intellectual response contains an element at least of tension, if not of some other form of response which we designate as emotional. A second general value is that by seeing the immense amount which these intensifications of human behavior have in common we open the way to exploring the possibilities of utilizing psychotherapeutic procedures found useful in one type of intensification to an attack upon other kinds of intensification. For instance, if we recognize that depression and hostility have much in common (quite apart from the hypothesis that depression is introverted hostility) then it is possible that therapeutic measures useful in dealing with depression may also be tried in disabling states of hostility. And this we have found to be the case, not universally, but often enough to be helpful. In a word, we have found it useful to treat a number of deeply hostile patients with electroconvulsive therapy, preparatory to continued work in psychotherapy.

From the point of view of understanding some of the responses of patients showing intensifications of behavior, it is most useful to recognize the fact that all these intensifications produce a degree of disorganization, and that hence it is not only those people who are extremely anxious but also those people who are depressed, and perhaps—though I am not so certain of this—those people who are extremely hostile, who show serious deterioration in their capacity to manage some deficit, such as a hearing deficit or a partial paralysis of one leg. When anxiety reaches a certain point of intensity, the ability to manage the hearing deficit or to manage the weakness of the one leg will decrease, with a consequent accentuation in the deafness and in the lameness; this, of course, tending to abate again once the intensification of the response has gone by. One goes on from here to wonder whether much of the difficulties of the individual who suffers from premature ejaculations may be of the same nature, namely, that where the intensity of his sexual response rises to an excessive degree, then his ability to manage a deficit in his control of his ejaculation response may well be decreased.

Again, one can see the usefulness of this way of thinking about these intensification responses when one comes to consider the process of the generalization of the cue. This phenomenon has been described primarily in connection with the anxiety responses; and the literature is full of excellent descriptions (Levy,[1] 1950) of children, terrified by a visit to a particular doctor, who have generalized to the point where not only does the particular doctor serve to set off the anxiety response, but all doctors, all older men and all those who wear white coats, regardless of whether they are doctors or drugstore clerks, may suffice to set off this terror response. We have not yet explored the extent to which the same may be true of tension in general, of hostility, and of excitement. However, I would point out that we are well aware of the fact that anxiety, long continued, may suffice to establish an autonomous response. Is the same true of guilt?

Let me now approach a most highly preserved piece of ground. This is an area in which important intellectual organizations have staked out some of their most prized claims. The region to which I have reference is that of the patient-therapist relationship. Before swinging over the edge into this hot arena, let us anchor ourselves firmly to one or two relatively fixed points which apparently lie outside the region of contention.

The first of these is that the human organism is not complete in itself; that one has to postulate another organism, if such functions as those of sex and communication are to achieve their full functional significance. A second point to which I think we can tie ourselves, without complaint, is that during its earliest years the human offspring is almost completely dependent upon others, even for such basic functions as putting things into himself, pinning himself up afterwards, and moving from here to there. In consequence of these two things, then, we may say that the human, perhaps above all other species, is singularly dependent upon his fellows.

Let us then go forward boldly and make what is the pivotal statement which I have in mind, namely, that human beings, whether in groups of two or larger, interacting with each other, can be more easily understood, at least in part, if studied not as two or more units but as a single unit. In the case of two people, I think it is convenient to coin the word "diploid" and say that when two people are in active relationship with each other, at least some aspects of their behavior may best be understood in studying them as a diploidal unit.

The idea of a unit must not impart too much of an impression of structure. If one needs a working analogy, I think one can find it in those little whirls and spins and dimples which one sees on the surface of the water where two currents come temporarily in contact with each other. This will perhaps represent both the transitorily lasting and the continuously recurring formation of diploidal units.

I hope you will see that this idea has certain immediate advantages over the older idea of the transference situation, to the extent that one does not have to posit a later developing countertransference; one simply sees two people in immediate interrelationship with each other and functioning, in part at least, as a unit. One also does not have to expand the ideas which one derives from a pathologic situation to an everyday situation, as is the case when one tries to apply what one knows about the transference to the everyday dealings with people; but, rather, taking this conception of the diploid, one immediately sees spread before him the entire panorama of interpersonal relations, whether between patient and therapist or between child and parent or between pick-up acquaintances in a railroad station.

Supposing, then, we postulate that a new unit of a temporary nature can be achieved through the interaction of two people. We can then pass on to ask what kind of functions are carried on by this new unit. For the sake of quick convenience, I would say that we may think of them as functions with respect to the external environment and with respect to internal activities. In regard to the external world, we are long familiar with the fact that people acting in relationship with each other deal quite differently with the external world from the way in which either of them deals separately. I have already referred to the fact that anxiety may be managed quite differently. When the group is expanded from two, we all know the extent to which hostilities tend to be projected outward, the extent to which the in-group reacts to those lying outside as areas into which antagonisms and hostilities which might otherwise be destructive to the members can be projected.

With regard to the internal functions, I would like to suggest to you that, among others, the functions of homeostasis and adaptation go on quite differently in such units from the way in which they go on in individuals separately. As an illustration of what I mean concerning the way in which homeostasis may be managed within a closely organized diploidal unit, let me relate the case of Mary and Millie. These two sisters were brought up in a home in which there was considerable deprivation of affection. Mary, who was somewhat the older, found that she could to some extent gratify her needs for affection by taking care of Millie, her younger sister. Millie, on the other hand, found that her older sister could provide her with a sense of security which she could not obtain from her neurotic mother. They both grew up to be somewhat damaged personalities. Ultimately each was married, and they continued to live in the same small town. They remained apparently devoted to each other, but both broke down progressively into a series of neurotic maladjustments. As their actions became better known, it became apparent that both girls were intent upon obtaining their chief affectional support from each other and could only achieve this support by seeing to it that neither of them became sufficiently well so that she could do without the other. When Mary had to travel, which she disliked greatly, to New York City, Millie would go to great pains to see that the proper reservations were obtained in the train, that Mary had the best possible room in the hotel in New York, and that there would be flowers in her room. At the same time she kept up a crescendo of telephone calls to Mary, saying that she hoped everything was going to be all right, that nothing would go wrong, that Mary wouldn't have any trouble, that there wouldn't be a train accident, that she would be well when she was in New York, and that, if she wasn't, she was to call Millie at once—all of which conspired to undermine Mary's confidence.

In contrast, Millie was not happily married, and Mary would lament and wring her hands over the great trials and tribulations which Millie had to endure. She acted continually, though quite unconsciously, to exacerbate the domestic situation. In this way, as is clear, both these girls gave each other a great deal of support, and yet, at the same time, each kept the other continually somewhat off balance from the point of view of confidence; consequently neither of them could get well as long as she remained in close relationship with her sister, since, if one of them got well, the other would immediately lose her source of support.

This same kind of relationship, of course, can be seen time and time again in the interactions between the passive, docile daughter and the domineering mother. The one does something for the other; they maintain each other's homeostasis, even though that homeostasis be essentially neurotic in nature.

Turning to the matter of adaptation, one may make the following points. The whole business of solving problems appears to go on somewhat differently when two people are in close interaction and are dealing with a particular problem. Among the differences is the tendency for one person to assume the initiative and the other to rely on that leadership. The extent to which problem-solving is facilitated, once a diploidal unit is set up, may perhaps be well seen in the psychotherapeutic setting itself, where, as is well known, the patient often comments upon how well he can "see" things, once he is with the therapist, and how, once the relationship has become attenuated during the intervening days, what he once saw now begins to disappear under the impact of his own repression.

It is also a matter of common experience how well the individual, in close working relationship with his therapist, is able to remember things which he was not able to recall before this relationship, which we have described as a diploidal unit, had been set up. It would seem to me that perhaps by use of this working concept of the diploidal unit one might obtain a good deal more understanding about such extremely important problems as the effects of early separation of the child from parental figures—the separation hypothesis as it has been so well described by Bowlby. One might also achieve further understanding of the lasting need for affection by individuals who have been deprived of this during important developmental stages. Finally, I would suggest that this selfsame concept might help us to understand some of the curious phenomena of fixation, whereby the attitudes and, in some measure, the behavioral patterns of late childhood may persist and be evoked, under certain circumstances, in those individuals who passed through those periods without having, one might say, fully worked them through at the time.

I should like now to pass on to another idea upon which I published in 1952.[2] Since it has evoked a few explosive reactions, I am encouraged to believe that it may contain something of value. It is the idea of the resolving capacity of the therapist.

You are all very much aware of the fact that whether in directive or so-called nondirective forms of therapy, the therapist is continually reacting to what the patient is bringing out. Indeed, part of his capacity as a therapist depends upon his ability to resolve his material into productive concepts. The word "resolve" I have borrowed from the microscopists; they refer to the greater resolving power of one eyepiece or objective over another. A high magnification microscope can, of course, enable the observer to see a meaningful pattern while a lower magnification instrument only reveals an amorphous background. So it is in therapy. Some therapists are able very quickly to see, in what the patient is saying, significances and meanings which may be denied, and, indeed, forever denied, to other therapists. It is also true, I think, that the resolving power of the therapist will vary in the same therapist from day to day, and certainly from patient to patient. We know very little about it. We do not know what the psychobiologic factors are which control this; and not even the simplest experiments have been set up upon the therapist.

We are quite accustomed to carrying out experiments upon the patient, but the therapist is another matter. We give benzedrine and thyroid and other hormones to the patient to see what effect these will have upon his production, but nothing of this kind to my knowledge has ever been done to see what effect this will have upon the therapist's capacity. And yet, undoubtedly, some extremely promising things are awaiting us in this connection. There would seem to me already to be little doubt, for instance, that this analyzing power of the therapist is subject to the laws of the summation of stimuli. We have already noted in the playback, for instance, a passage of relatively hidden significance; and if that passage is played over and over again by the therapist, the chances are that the hidden meaning will emerge.

I have spent a little time on this matter of the resolving power of the therapist because I think it is extremely interesting and important from the point of view of therapy, but also because it seems to me to be related to something of still greater importance, namely, to the whole matter of creative thinking, and to what is really the missing part of the scientific method. It must have struck the members of this Society as odd that so much care and thought have been devoted by science to working out a method of asking questions. One notes, for instance, the immense amount of work which has been done on the nature of the experiment, and the current intense interest in experimental design; one notes the great concern over the establishment and maintenance of criteria of proof; one notes the care which has been devoted to a somewhat more nebulous matter, the description of the scientific attitude. One must at the same time remark that very little care and, indeed, hardly any thought has been given to that most important of matters, namely, how the scientist goes about the business of asking questions.

In 1948 I wrote about a rather simple idea[3]: that, rather than thinking of science as a sort of system which could be set into action by any reasonably intelligent person, a system which somehow exists apart from those who use it, we might well be on sounder ground if we thought about science as a form of behavior, if we learned about science, studying what the scientist does when he goes about his work.

When we think about the scientist in this way, it at once brings into the sharpest prominence the fact that perhaps the most important thing that he does is to define problems for solution, and often the most successful scientist seems to be the one able to define the most crucial and fruitful questions. I daresay you would spend a very long time trying to discover in what has been written on this anything at all which has been done on this matter of setting down our question-framing behavior in a code of procedures, such as we have developed so meticulously for the answering of these selfsame questions. At this stage in its development science is a one-armed giant.

I think it is reasonable to say that what the therapist is doing in using his resolving powers on the stream of material which the patient is bringing out is this very business of attempting to set up crucial and fruitful questions for answer. Hence you will see that in the psychotherapeutic setting there exist opportunities for us to work out not only the answers to important questions, but we have an unrivaled opportunity to study the way in which the scientist goes about the business of defining and setting up questions for answers.

In quick summary, let me say that I have urged upon you tonight the undesirability of permitting premature crystallization of our concepts concerning this dynamic and difficult field of psychotherapy; and I have also indicated to you my belief that further progress in this field must be dependent upon clarification of the basic premises which we intend to use as the groundwork of our working concepts. I have gone on from there to outline to you some working concepts which, in greater or lesser degree, depart from the orthodox. I do not claim that these concepts are buttressed by experimental findings; that is not necessary to my purpose, which is simply to put before you ways of thinking about psychotherapy which I hope may prove useful to you in this most engaging of the many aspects of our work as psychiatrists.

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CESAREAN HYSTERECTOMY

A Review of Forty-six Cases[*]

SAMUEL M. DODEK, M.D., F.A.C.S.

Assistant Clinical Professor of Obstetrics and Gynecology, George Washington University School of Medicine

JOSEPH M. FRIEDMAN, M.D.

Clinical Instructor of Obstetrics and Gynecology, George Washington University School of Medicine

HOWARD P. TREICHLER, M.D.[†]

Waterloo, Iowa

SECCORA G. DeCASTRO, M.D.

Chief Resident in Obstetrics and Gynecology, Garfield Memorial Hospital, Washington

IN 1876 Edvardo Porro[1] of Pavia published an article in Milan entitled "Amputation of the Uterus and Ovaries as a Safeguard against Hemorrhage and Other Accidents after Cesarean Section." That classical contribution appearing in the post-Listerian part of the 19th century marked the introduction of a crude, yet the first, cesarean hysterectomy, and the beginning of an important epoch in maternal welfare. Modified improvements in surgical methods and today's extraperitoneal and low cervical cesarean sections, and the use of antibiotic preparations and chemotherapeutic drugs have eliminated a few of the indications for this crude original supravaginal operation. But as recently as 1939[2] radical amputation of the uterine body was the operative method of preference when, in the presence of infection, vaginal delivery was obstructed or considered impossible.

Porro's fundamental conception of the value of his now improved procedure still holds, however, since many of the indications which he listed 76 years ago are indications for today's cesarean hysterectomy. Formerly, too, a large number of the patients upon whom this procedure was performed were operated upon because of necessity and not because of election. This is not completely true today. Only 25 per cent of the patients whose records we are scrutinizing at this writing were operated upon without their foreknowledge and consent. These were exceedingly responsible decisions for the operators to assume, particularly since some of necessity followed the stillbirth of an only child. However, under these circumstances the lives of the patients were often ebbing rapidly and only quick decisions and emergency measures carried out with coördinated and coöperative hospital teams could have reversed the lethal tide.

When the decisions can be made during the prenatal period, there is ample time to consider the advisability and effects of such an irrevocable operation as the removal of the uterus shortly after the abdominal delivery of the baby. Under these more desirable circumstances the physician, and the patient together with her husband, can consider leisurely the value and implications of the proposed operation.

There is justification for the operation if the woman is at the end of her childbearing period and the uterus serves no useful purpose; or if there are neoplastic diseases of the uterus or defective scars from previous myomectomies or cesarean sections; or if some incapacity exists from previous extensive trauma to the birth canal. Furthermore, the operation must not increase the risk and morbidity of cesarean section per se, but rather offer a subsequently normal sexual life free from the hazards of serious pelvic pathology.

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[*] Read before the Washington Gynecological Society, December 9, 1952.

[†] Formerly Chief Resident in Obstetrics and Gynecology, George Washington University Hospital, Washington, D. C.

Hysterectomy following cesarean section is not a very common operation. It therefore occurred to us that it would be instructive to review those which had been performed recently in the two institutions with which we are affiliated, and to consider the conclusions.

There were a total of 27,590 deliveries in the George Washington University Hospital and the Garfield Memorial Hospital from April 1, 1948 to the present time (December 1, 1952) and they were almost equally divided between the two institutions.

Eleven hundred and seventy-seven, or 4.3 per cent, of the deliveries were terminated by cesarean section of one type or another, and there was very little difference in the incidence for either hospital. Only 46 of these cesareans were followed by an immediate hysterectomy.

Thirty-five of the 46 patients were private patients and they were operated upon by 18 different surgeons. Five of the surgeons performed 22 of these private cesarean hysterectomies, and the remaining 13 were done by 13 individuals. The greatest number of private cases done by any single surgeon was 9. Some of the surgeons who performed more than 1 operation did not do them all in one hospital. The 10 staff patients were operated upon by the residents under supervision.

Many of the physicians represented in this review are on the staffs of both institutions, and although there is no official connection between the two hospital services, one may assume that there is a similarity of agreement in obstetrical management in general. With such a dovetailing of staffs, it seemed that a combined survey would be meaningful.

The indications for the operations have been classified as elective and nonelective. The former includes those cases in which the decision was made prenatally to perform a hysterectomy at the time of an elective cesarean section. The latter group are those in which hysterectomy was performed for the main purpose of controlling uterine hemorrhage when other methods had failed, after an emergency cesarean section.

Among the 36 elective cesarean hysterectomies (table 1) it will be noted that 19 patients had previously been delivered by cesarean section but that only in 7 was that the sole indication for removal of the uterus. Ten also had leiomyomas of the uterus. In 1 there had been a

TABLE 1

Indications for Elective Cesarean Hysterectomy

April 1, 1948–December 1, 1952

1. Previous cesarean section		7
1 previous section	2	
2 previous sections	3	
3 previous sections	2	
2. Previous cesarean section, associated with:		
a. Leiomyomas of the uterus		10
1 previous section	4	
2 previous sections	5	
3 previous sections	1	
b. Rh incompatability and failed tubal ligation		
3 previous sections		1
c. Occult rupture of the uterus		
1 previous section		1
3. Leiomyomas of the uterus		10
4. Previous myomectomy		1
5. Previous hysterotomy and cervical repair		1
6. Previous extensive pelvic surgery for menorrhagia and dysmenorrhea without relief		1
7. Detached retina and leiomyoma of uterus		1
8. Third degree prolapse of the uterus; cervicitis		1
9. Diseased adnexa; full-term intraligamentous pregnancy		1
10. Previous dystocia terminated by craniotomy, with pseudomucinous cystadenocarcinoma of ovary and metastasis		1
Total		36

failure to accomplish sterilization by tubal ligation during the cesarean section immediately preceding. That patient had a marked Rh-negative antibody reaction and had given birth to an erythroblastotic baby. Still another of these patients had an occult rupture of a previous cesarean scar.

There is always the risk of dehiscence of the scar of a previous cesarean section, especially following the classical section, if labor is allowed to progress or if vaginal delivery is permitted. The safety of the repeated elective cesarean section is now so well established that we do not believe one is justified in courting the greater hazard of a ruptured uterus during a subsequent labor.

Ten of the patients who had not been delivered by cesarean section previously had leiomyomas of the uterus which demanded surgical treatment and in whom subsequent pregnancies were considered inadvisable. Three others had had previous pelvic surgery, and the uterus in each instance was no longer considered a useful organ.

One woman was suffering from detachment of the retina and this was the immediate indication for terminating her reproductive capacity. There was 1 case of complete prolapse of the uterus with marked cervicitis. Another patient was delivered abdominally of a full-term living intraligamentous pregnancy.[3] Her uterus was removed because the uninvolved fallopian tube was grossly diseased and clubbed, and the uterus was therefore considered a useless organ.

The only patient in this group of 46 who did not survive was afflicted with metastasis from carcinoma of the ovary. She was operated upon primarily because of a contracted pelvis and the loss of her first baby by craniotomy. This unfortunate woman died 5 days postpartum from metastasis. It is very satisfying to note that there were no other deaths among the entire group of 1,157 cesareans.

There were 10 nonelective cases (table 2). The uteri were removed in order to establish hemostasis after other methods had failed following emergency cesarean sections. Six were cases of premature separation of the placenta, 1 of placenta accreta, and 1 of placenta previa. In the 2 other cases the uteri had ruptured through the scars of previous cesarean sections before the elected date of abdominal delivery. The case of 1 patient in this group of 10 was also complicated by preëclamptic toxemia, but there were no instances of blood dyscrasia.

TABLE 2

Indications for Nonelective Cesarean Hysterectomy

April 1, 1948–December 1, 1952

Premature separation of placenta	6
Placenta accreta	1
Placenta previa	1
Rupture of previous cesarean scars, before elected date of repeat section	2
Total	10

In all of these nonelective cases subtotal or incomplete hysterectomy was employed. Undoubtedly it seemed expedient at the time to terminate the operations quickly because of the urgency of the circumstances. Some idea of the severity of the bleeding and the degree of shock may be realized from the fact that an average of more than 2,000 c.c. of blood was given by transfusion to each of these patients before the loss of blood was considered satisfactorily replaced and controlled.

The removal of the uterus from each of these 10 women, whose average age was 34.5 years, left 2 of them childless, and the others with 2 children each. Only 4 babies in these 10 pregnancies survived. We do not now know how any of the causes which were responsible for the sacrifice of the babies and the reproductive organs could have been anticipated or avoided. The 2 cases of rupture of the uterus occurred at 30 and 36 weeks of gestation, and certainly before anyone would have been likely to elect to terminate the pregnancies.

On the brighter side is the complete recovery of all of these 10 mothers and their restoration to health. This is a tribute to the ability and good judgment of the physicians attending them and to the excellent organization of the hospital services and the resident staffs. The availability of sufficient blood of all groups through the intramural blood banks and the District Chapter of the American Red Cross played an important part in saving the lives of many of these patients. One of them received 4,000 c.c. of blood by continuous transfusion and without any delays.

In both of the institutions where these emergency operations were performed there is a sterilized set of cesarean section instruments which can be made instantly available in the same delivery room where the decision is reached to deliver the baby abdominally. As a matter of fact, vaginal examinations which are made in the presence of more than average or normal genital bleeding, after the period of viability, are always performed in the delivery suite, with the so-called "double set-up" in readiness.

The results of the 36 elective cesarean hysterectomies, by their very nature, present a better picture for the most part. The average age of these patients was 38 years, an age when the average North American woman has very often voluntarily limited the size of her family. Only 1 of these mothers did not take her baby home. In this case the baby was born dead, macerated after an intrauterine death caused by a very high Rh-negative antibody titer. This woman had not been expected to become pregnant, since her oviducts were supposedly ligated at a previous cesarean section.

These 36 women had a total of 96 children, a figure closely approximating the size of the average family in the United States today. We believe it is especially high for this group of women, whose over-all childbearing capacity is not comparable to the average woman whose pelvic organs have no gross pathology.

Thirty-three of these 36 women were discharged on the seventh to the tenth postpartum or postoperative day. One remained for 15 days and another for 13 days because of secondary operations. It was necessary to free a partial intestinal obstruction in the first case and to repair the abdominal wound in the second after eventration caused by coughing. Three other patients could also be considered to have had a morbid postoperative course in that their temperatures were over 100.4°F. for 2 consecutive days, but it was not more than 3 days in any case.

There was no extreme blood loss among these elective cases. Each patient received 500 c.c. of blood during or immediately after her operation.

Only 8 of all these 36 women were fortunate enough to have had a complete or total hysterectomy performed. The reason for this overwhelming decision to perform an incomplete operation in so many elective cases does not appear clear from reading the records. There were 10 operations in this entire series which were personally performed by the senior author. Three were nonelective. Of the 7 elective hysterectomies only 3 were complete. It is now believed that all of them should have been complete.

It is our belief now that the same reasons for removing the cervix in gynecologic hysterectomies should hold when the operation is performed after cesarean section. The cervix is the most frequent site of genital cancer. Malignant changes develop in about 2 per cent of retained cervices. If the retained cervix does not become malignant, it may become the source of an annoying leukorrhea. The carefully executed removal of the cervix with the body of the uterus does not shorten the vagina sufficiently to cause dyspareunia, and there is probably less likelihood of the vaginal vault prolapsing than when the cervix is retained. The removal of the cervix has no effect upon sexual desire or orgasm.

Although there is indeed greater vascularity of the supporting structures of the uterus and some dilation of the ureters at the end of pregnancy, the surgical steps in the complete removal of the uterus following cesarean section are essentially the same as when the operation is performed upon the nongravid organ. M. Edward Davis[4] described a technic which he used in the Chicago Lying-in Hospital for the successful management of 100 complete cesarean hysterectomies which were performed during approximately the same period represented by this report.

The latter half of the fifth decade of a woman's life usually marks the physiologic termination of childbearing, and during that period the activity of the ovaries inclines toward quiescence and later senescence. Occasionally malignant activity stirs the inactive cells of the menopausal or postmenopausal ovary, and silently they may grow to an inoperable and incurable degree.

We believe that it is advantageous to remove the ovaries of some women of the menopausal age at the time of a hysterectomy. The symptoms of the induced menopause can be relieved almost entirely with psychosomatic therapy and estrogenic preparations, but there is no simple cure for ovarian cancer.

SUMMARY

The lesson which can be learned from this study of a small experience is very enlightening:

1. It demonstrates the safety of the cesarean hysterectomy as performed by the physicians whose cases were reviewed, although the operation was done only occasionally by any single surgeon.

2. It reveals that the women whose childbearing was elected to be terminated by cesarean hysterectomy had reached the age when most women voluntarily limit their families; and that their families were of the average size.

3. It shows that most of the elective cases were associated with pelvic pathology for which another abdominal operation probably would have been necessary.

4. The number of elective complete hysterectomies which were performed was too few, since haste to complete the operations was not a matter of extreme importance.

5. The removal of the ovaries of women in the menopausal decade was apparently not accepted as necessary in any instance; this attitude should be reëvaluated.

6. During the same recent 4 years and 8 months spanned by this review there were 169 other women in the same hospitals who were delivered by cesarean section followed by tubal ligation. Surely much thought was necessarily given before it was decided that the risk of subsequent pregnancies and further repeated abdominal deliveries was too great for them. Yet it must be assumed that no serious consideration was given to the other real risks which confronted these now sterile women and their 169 useless, retained uteri, namely, the possibility of uterine neoplastic disease later on or repeated episodes of metrorrhagia requiring the constant vigilance of repeated cytologic examinations and diagnostic curettements.

Although complete cesarean hysterectomy is more difficult and hazardous to perform than a cesarean section followed by tubal ligation, the experienced obstetric surgeon should be able to minimize that additional risk. Some of the 169 cases mentioned above might have offered an excellent opportunity for the attending obstetricians and senior residents to become familiar with the execution of complete cesarean hysterectomy so that they would be more adept when a nonelective indication suddenly presented itself.

It seems almost diabolical that the organs which protect and nurture human life are among the first and most frequent sites of cancer and that they bring destruction to the individual whom they formerly served so fruitfully. This apparently unfair paradox is a challenge to us as women's doctors. We can eliminate the risk of cancer to some extent if we dare to be more progressive in our indications for cesarean hysterectomy and consider the removal of the entire uterus, when possible, whenever we enter an abdomen to terminate pregnancy and childbearing at the same time.

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PHEOCHROMOCYTOMA AND HYPERTENSION*

ROBERT G. TAYLOR, M.D.

Clinical Instructor in Medicine, George Washington University School of Medicine

ALTHOUGH pheochromocytomas are relatively rare tumors, it is important to recognize their presence, especially when we are dealing with a hypertensive disease. Here is a type of hypertension that can definitely be cured provided a diagnosis is made early enough. The successful surgical removal of such a tumor before irreversible cardiovascular damage is caused or sudden death takes place is dramatic and life-saving. In the past few years there has been increasing interest in this disease, and we have learned more about its variable characteristics and have developed better diagnostic measures.

In 1922 Labbé first described the clinical features of such tumors. In 1927 Dr. Charles H. Mayo[1] successfully removed a pheochromocytoma for the first time. This was an exploratory procedure in a patient with paroxysmal hypertension and abdominal distress, in whom the abdominal sympathetics were thought to be involved. Pincoffs,[2] however, in 1929 reported the first successful excision of a tumor from a patient in whom the diagnosis had been made preoperatively. Now there are probably about 250 cases reported in the literature, and on more than half of these cases surgery has been employed.

Pathologic Considerations

Pheochromocytomas are tumors of chromaffin tissue, 90 per cent of which are found in the adrenal medulla but may be located anywhere chromaffin tissue is found in early life, the abdominal paraganglia, organs of Zuckerkandl, or even the thoracic paraganglia. Sixty per cent of the adrenal medullary pheochromocytomas are located on the right side and 30 per cent on the left side, and 10 per cent are bilateral. About 16 per cent of all chromaffin-cell tumors are multiple. Extra-adrenal chromaffin-cell tumors are frequently called paragangliomas.

The average size of these tumors is that of a lemon, but they have been reported varying from 2 to 18 cm. in their greatest diameter. They are well circumscribed, usually lobulated, yellowish-brown, and fleshy. The larger tumors show areas of degeneration with necrosis, hemorrhage, and cyst formation. The characteristic cells are large, polyhedral, liver-like cells with relatively small nuclei and voluminous cytoplasm, which is somewhat granular. Apparently epinephrine in the cytoplasm reduces chromium salts in appropriate fixatives to form insoluble, fine, brown granules of peroxide of chromium. A vascular, fine connective-tissue stroma surrounds groups of these cells. Actually, only 10 per cent of these tumors are malignant and metastasize clinically, despite the tendency of all tumors to show cellular dedifferentiation.

Physiopathologic Considerations

It was thought for many years that the clinical manifestations of pheochromocytomas were due to the secretion of epinephrine by these tumors. In 1929 Rabin made the first quantitative estimation of epinephrine in a pheochromocytoma and noted that it was in excess of the amount normally found in the adrenal gland. Ernould and Picard[3] in 1934 reported a pressor substance in the blood during a hypertensive crisis. Beer, King and Prinzmetal[4] later demonstrated a pressor substance which they considered to be epinephrine circulating in the blood during such a crisis.

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* Read before the Loius Mackall Medical Society of Washington, D. C., February 19, 1953.

Since 1946, when von Euler[5] demonstrated a primary amine similar to epinephrine in the extracts of postganglionic adrenergic nerves of cattle, a great deal has transpired. This primary amine, called norepinephrine, is the same as epinephrine except for the absence of a methyl group. Since methylation can occur readily in the body, norepinephrine is now considered to be the precursor of epinephrine. Data are accumulating rapidly to indicate that epinephrine is formed directly by the transmethylation of norepinephrine, and furthermore, it can occur in the adrenal medulla. These facts have prompted some investigators to suggest that essential hypertension may be due to a deficient transmethylation of norepinephrine to epinephrine.[6] Furthermore, there is evidence to believe that in a pheochromocytoma this transmethylation is definitely impaired and there is an accumulation of norepinephrine.

Goldenberg,[7] using a filter paper chromotographic method of assay, found extracts from normal adrenal medulla to contain about 18 per cent norepinephrine, whereas pheochromocytomas studied by the same method contained 50 to 90 per cent norepinephrine. Holton[8] studied 3 pheochromocytomas by bio-assay and discovered that the. first contained 3.7 mg. epinephrine and 6.3 mg. norepinephrine, the second 0.32 mg. epinephrine and 5.3 mg. norepinephrine, and the third 0.37 mg. epinephrine and 5.5 mg. norepinephrine.

The next important contribution was made by Goldenberg and his associates,[6] who reported in the *American Journal of Medicine*, October 1948, the strikingly different cardiovascular reactions of man to epinephrine and norepinephrine. By means of an intravenous infusion, so arranged that they could introduce into the circulation calculated and known amounts of epinephrine and/or norepinephrine, as well as plain saline solution, they then carefully recorded the reactions of these hormones on the blood pressure, pulse, mean arterial pressure, cardiac output, and the total peripheral resistance. They made these studies on 36 patients. Twenty were hospital patients without any cardiovascular disease (normotensives), 14 had uncomplicated essential hypertension, 1 suffered with chronic nephritis, and another had hypertensive cardiovascular disease.

When epinephrine was infused there was an immediate increase in cardiac output with a significant rise in systemic systolic pressure and an insignificant rise in the diastolic pressure. The over-all peripheral resistance fell. The pulse rate was moderately increased. When norepinephrine was infused there was little or no change in cardiac output, with a significant rise in both systolic and diastolic pressures. There was a marked increase in peripheral resistance and in all cases some decrease in pulse rate. When equal amounts of epinephrine and norepinephrine were infused simultaneously, the effect was antagonistic and resembled those reactions that could be caused by a lesser amount of epinephrine alone. In addition to these differences, it was observed that while patients were receiving epinephrine infusions they invariably complained of palpitation and other unpleasant symptoms, in contrast to the relative lack of any subjective symptoms, even in the presence of high blood pressure, while they were being infused with norepinephrine. This, plus the other instrumental observations, is why Goldenberg states that "norepinephrine in normal subjects produces a type of hypertension that closely resembles that of essential hypertension."

CLINICAL MANIFESTATIONS

It is understandable, then, why pheochromocytomas can produce a wide range of clinically observable phenomena. It is known that they are capable of secreting simultaneously variable amounts of these potent pressor substances. Furthermore, the size of the tumor bears no direct relation to the amount of secretion. A tumor secreting a high proportion of norepinephrine might be expected to produce signs and symptoms resembling essential hypertension.

On the other hand, proportionately more epinephrine can cause disturbing subjective symptoms and metabolic changes as well as hypertension.

Whenever hypertension is known to exist, the possibility of the presence of a pheochromocytoma should be considered. If all hypertensives were adequately studied, fewer of these tumors would be overlooked. In 1947, when 1,000 patients selected for sympathectomy were carefully studied by Smithwick, 5 proved to have a pheochromocytoma. DeCourcey[9] discovered 3 patients with such a tumor among 31 individuals who sought bilateral subtotal adrenalectomy for "malignant hypertension."

Although paroxysmal hypertension is quite characteristic of this condition, there are many more who have a persistent hypertension. Apparently there are some tumors which intermittently release epinephrine and norepinephrine, whereas others provide a constant and continuous supply into the circulation. It is postulated that early in the development of these tumors there is a spasmodic discharge of these hypertensive agents causing intermittent rises in blood pressure. As further development occurs and the tumors increase in size, there is a more frequent rise in systemic pressure and to a greater level. At this point renal ischemia is produced as the result of the action of these vasoconstrictors and additional hypertensive agents are provided by the kidney to initiate persistent hypertension. Frequently epinephrine and norepinephrine are released from these tumors in response to emotional stress, physical strain, or with manipulation or pressure on the tumor itself.

It is to be noted, on the other hand, that not all cases with paroxysmal hypertension have a pheochromocytoma. Such findings may be present and have been observed in cases of nephritis, eclampsia, lead poisoning, aortitis, essential hypertension, and various diseases of the nervous system, such as epilepsy, traumatic or vascular damage to the brain, and meningitis.[10] Rowntree and Ball[11] reported a case of tabes in which there were paroxysmal elevations of blood pressure ranging from 90 to 235 mm. systolic pressure, and there was no chromaffin tumor located at operation, nor was any tumor discovered later at autopsy. Rarely in children, however, has there been noted paroxysmal hypertension with associated metabolic changes and no tumor discovered.

When the pressor substance is released into the circulation from the tumor mass, a typical syndrome is produced. This is the so-called "attack" associated with this condition, and these attacks may occur at varying intervals and may last from a few minutes to several hours. During an attack there is a sudden rise in the blood pressure accompanied by tachycardia and palpitation. The patient is usually quite anxious or agitated. Severe headaches suddenly occur, and many times there may be pain located in the chest, abdomen, or even in the extremities. There is pallor, particularly in the face. Nausea and vomiting may take place. During the attack, especially near the end, there is profuse sweating, following which there is profound weakness and exhaustion. Severe attacks may cause death from pulmonary edema, cerebral hemorrhage, or shock.

Associated with paroxysmal attacks of hypertension, and present as well in those cases with more or less persistent hypertension, there may be certain metabolic changes.

Hyperglycemia, with or without glycosuria, has been noted to accompany the rise in blood pressure. Hyperglycemia with persistent hypertension should suggest the presence of an adrenal medullary tumor. The glucose tolerance may vary but frequently shows a low tolerance to glucose. There have been several cases reported in the literature in which the diabetes, as well as the hypertension, disappeared after the removal of a pheochromocytoma.[12,13]

Hypermetabolism with basal metabolic rates above plus 20 may be present. Hypermetabolism plus hypertension, especially with a normal blood iodine level or when the uptake of radioiodine by the thyroid gland is normal, can possibly mean that the patient has a pheochromocytoma.

An intermittent elevation of body temperature, not necessarily related to hypertensive crisis, has been found in over 70 per cent of these patients.[14] Hyperthermia of 104° to 105°F. occasionally occurs during an attack. However, an elevation of 1°F. between attacks or with persistent hypertension has been found significant in the differential diagnosis of this condition, especially when no other cause for fever seems to exist.

It is also important to remember that postural hypotension with tachycardia may be observed in cases of pheochromocytomas. In other types of hypertension the blood pressure rarely falls, nor does the pulse increase over 20 beats per minute when the patient arises from a horizontal to an upright position.

The great majority of hypertensives, probably about 90 per cent with essential hypertension, have more than 20 mm. systolic and 15 mm. diastolic elevation of blood pressure following the immersion of a hand in ice water for 1 minute. Three fourths of the cases with pheochromocytoma have a normal cold pressor response, meaning that there is less than 20 mm. systolic and 15 mm. diastolic elevation with immersion of the hand in ice water.

In addition to the hypertension, particularly in cases with sustained hypertension, the signs and symptoms most commonly observed in the order of their frequency are excessive sweating, elevated temperature, normal cold-pressor response, fasting blood sugar of 120 mg. per 100 c.c. or more, basal metabolic rates of plus 20 per cent or more, vasomotor phenomena, and postural hypotension.

DIAGNOSTIC PROCEDURES

If characteristic attacks of paroxysmal hypertension have been observed, or, if one's index of suspicion has been high enough to seriously consider the diagnosis of pheochromocytoma, what diagnostic procedures are then available to support the clinical observations or to affirm our suspicions?

These procedures may be listed as follows:

1. Demonstration and estimation of pressor substances in the blood.
2. Localization of a tumor by means of X-ray examination.
3. Pharmacologic tests.

We are still looking for a simple and practical method of estimating the amount of epinephrine and norepinephrine in the blood. Beer, King and Prinzmetal's method[4] of demonstrating the pressor effect by perfusing the denervated ear of a rabbit is too cumbersome and still not accurate. Shingleton and Baker[15] have more recently described a fluorometric method which is still far from being simple. Whenever we do find a simple method of analysis, there is hope that the diagnosis of this condition will be greatly simplified.

X-ray visualization of these tumors has proven to be of considerable value. Plain abdominal films may show a shadow if the tumor is large, and particularly if there is any calcification. Intravenous or retrograde pyelography often reveals a downward displacement of the kidney or a flattening of the upper pole of the kidney, if the tumor is within the adrenal. Laminograms may localize a tumor, except if it is small or if it is in a bizarre position. The best way to demonstrate an adrenal medullary tumor is usually by perirenal insufflation. This can be accomplished by introducing approximately 500 c.c. of air, carbon dioxide or oxygen directly into the perirenal tissues. The maneuver is difficult and requires practice. Also it is not without risk, and there have been some deaths reported from air emboli. Helium was used with excellent results by Levine.[16] The helium casts a somewhat darker shadow and diffuses more readily than oxygen. Presacral perirenal pneumography seems to be the more popular way of insufflating the perirenal areas and is probably less hazardous. Renal arteriography may be accomplished by introducing one of several contrast mediums into the renal branches of the abdominal aorta, either through translumbar aortic puncture or the more complicated retrograde catheterization of the abdominal aorta through the femoral artery. Renal arteriography is a risky procedure. There are not many clinics that use this X-ray method of diagnosis. When the tumor is not in the adrenal medulla it is more difficult to recognize. Intrathoracic tumors, of which there have only been 5 reported, are clearly visualized by means of X-ray films of the chest.

The pharmacologic tests which have proven so useful in the diagnosis of pheochromocytoma employ 2 groups of drugs: those which will provoke an attack and those which will block the pressor effect of epinephrine and norepinephrine when present in the blood, if a pheochromocytoma is present.

In the paroxysmal types of hypertension the use of histamine, mecholyl, or tetraethyl ammonium bromide to provoke an attack is frequently considered as a diagnostic aid. Histamine, given intravenously as 0.025 to 0.05 mg. of histamine base, should raise the blood pressure higher than was exhibited during the cold pressor test.[17] It has also been demonstrated that 25 mg. of mecholyl, given subcutaneously, will produce a rapid rise in blood pressure, lasting from 15 to 20 minutes, in the presence of a chromaffin tumor.[18] Similarly, when 100 to 300 mg. of tetraethyl ammonium bromide is administered intravenously a hypertensive reaction is produced.[19] Histamine is probably the most reliable test substance. Mecholyl may produce undesirable side-reactions such as nausea, sweating, salivation, and dyspnea. All of these drugs are capable of raising the blood pressure to excessively high levels and should be used only in the normotensive state. The elevation caused by tetraethyl ammonium bromide can be controlled simply by tilting the patient into the upright position. However, this drug produces the least reliable results. Roth[20] stresses the importance of omitting all narcotics, sedatives and other pressure-lowering agents before any pharmacologic tests are performed. These drugs may influence the tests and produce false positive results.

In cases of persistent hypertension, due to increased amounts of circulating epinephrine and norepinephrine in the blood, adrenolytic drugs, such as benzodioxane, dibenamine or regitine, when used, will block the pressor effect of these hormones and cause a significant drop in blood pressure.

The use of benzodioxane as a simple test for pheochromocytoma was suggested by Goldenberg, Snyder and Aranow.[21] They recommended 0.25 mg. per kilogram of body weight given intravenously over a period of 2 minutes. The drug supposedly inactivates circulating epinephrine and norepinephrine. In hypertensives due to other causes it produces no effect or has a pressor effect. The depressor action is of short duration and may escape detection. Side-reactions, consisting of palpitation, tachycardia and flushing, are mild and of short duration. False negative tests have been reported. However, Goldenberg believes that they are due to irreversible vascular changes in the presence of a tumor and not dependent on circulating pressor substances. False positives seem to occur mostly in cases having hypertensive cardiovascular disease with uremia. Dibenamine,[22] the next adrenolytic drug to be reported, has a longer reaction but greater side-effects. Unfortunately, it also has a depressor effect in the presence of essential hypertension and cannot be used as a reliable diagnostic test.

Regitine has proven to be the most reliable adrenolytic drug so far. It is more accurate, relatively safe, and simple to use. Grimson and his co-workers[23] first described its use in 1949. Regitine produces a blocking action on the receptors of excitatory sympathetic impulses.[24] It can be given either intramuscularly or intravenously when used as a diagnostic test. There are no unpleasant side-effects. Tachycardia has occasionally been noted, and rarely has weakness, dizziness, or flushing been caused. False positives have been reported only when more than 5 mg. was given intravenously, or when the patient has received sedatives or narcotics during the 24 hours preceding the test, or when the resting blood pressure has been in the low hypertensive range (from 140 to 170 mm. systolic pressure). In 259 patients tested by Gifford, Roth and Kvale[25] there was 1 false positive test despite all precautions. No false negative tests have as yet been reported.

Regardless of which diagnostic procedure is employed, or how carefully the procedure is conducted, no single test is infallible. An accurate diagnosis, therefore, depends on the careful evaluation of the results obtained following the use of several tests.

TREATMENT

The treatment of pheochromocytoma is surgical removal. X-ray therapy has been tried in a few cases with poor results. Graham[26] reviewed 198 cases of pheochromocytoma to which he added 9 of his own. Of these, 125 were treated by surgical removal of the tumor or tumors; 33 died, with operative deaths in most instances from shock. Among the 92 who survived, 4 had a recurrence, 2 from a tumor in the opposite gland, 1 from a metastatic tumor, and 1 from an unknown source; serious hypertension continued in 2, while 4 continued to have mild asymptomatic hypertension. Goldenberg[27] reported that hypertension continued for a varying period of time in 7 of his 12 patients following surgery. This lends support, as he contends, to his view that excessive amounts of pressor agents need not be constantly present to maintain the elevation in blood pressure initially produced by them.

The operative mortality has been reduced in the past few years. This has been possible because of better understanding of this condition, careful planning of the surgical procedure, better anesthesia, improved surgical technic, and the use of vasopressor and adrenolytic drugs. To prevent anesthetic-induced paroxysms regitine is given preoperatively. Spinal anesthesia is to be avoided because of its effect on blood pressure. The anesthesia usually employed is intratracheal gas-oxygen-ether. The usual kidney incision with resection of part of the twelfth rib is preferred for better exposure and to facilitate removal. However, transabdominal lapa rotomy has the advantage of affording better palpation for multiple tumors.

During operation an intravenous infusion is set up so that by adjusting a 3-way stopcock saline solution, a solution of regitine, or a saline solution of norepinephrine can be administered immediately as the patient's condition demands. Most of these tumors are very vascular, and blood transfusions should be available to replace blood loss. The chief danger in removal of these tumors is a severe hypertensive reaction with subsequent left heart failure and shock.

SUMMARY

Pheochromocytomas are relatively rare tumors of chromaffin tissue. Ninety per cent of these tumors are located in the adrenal medulla, and 60 per cent of these medullary tumors are found in the right adrenal.

They are known to contain, and to secrete into the circulation, variable amounts of epinephrine and norepinephrine. These hormones have strikingly different cardiovascular reactions.

Pheochromocytomas may produce characteristic attacks of paroxysmal hypertension. However, recent reports indicate that a sustained type of hypertension is more frequent.

All hypertensive patients should be carefully evaluated and adequately studied so that these tumors may not be overlooked. Clinical signs and symptoms have been enumerated. Certain diagnostic procedures, particularly the use of pharmacologic tests, which require no unusual facilities and are readily available, are listed.

The treatment for pheochromocytoma is surgical excision. The removal of such a tumor or tumors, before irreversible cardiovascular damage is caused, cures the hypertension and saves a life.

(*Continued on page 278*)

President's Page

SELF-DISCIPLINE

There are good and bad in all of us. The ratio varies. Some of us recognize our weaknesses and try to overcome them, more or less successfully. Some of us discern them but merely try to hide them. Others fail to discover them, and they either come to light intermittently or dominate our lives. Some degree of self-discipline develops in most of us as we pass through childhood and adolescence and come face to face with the world in our early adult years. Self-discipline engenders a sense of responsibility.

Self-discipline is important not only for individuals but for groups. Societies which do not exact discipline of their members fail in their duty both to the member and the public. In professional life, and particularly in that of a physician, the discipline of the profession, meaning adherence to a code of ethics, should be inculcated during the years spent in the professional school and the period of graduate training. If such discipline fails to develop and the graduate becomes a member of an organized medical society, it devolves upon the society to exact the discipline, once it is established that it is lacking. If the society does not succeed in this, the incorrigible member should be expelled.

I am afraid that as a Society we are sometimes overly cautious in calling our members to task. We are loath to devote the time involved in acquiring and assessing the evidence, and we shrink from legal action or fear its possible use against us. It is a human trait to wish to avoid "scenes" or to be sued. But if we are to have "clean skirts" and merit the respect and confidence of the public, we must not shirk.

Our Grievance Committee finds evidence of a lack of self-discipline in a few of our members. Happily, most of these are willing to correct their ways. Most complaints brought by patients against physicians, however, are due to misunderstandings that could be avoided if the physician took time to explain the medical intricacies and discuss financial arrangements.

The epidemic of malpractice suits that has plagued us in recent years has been due in part to lack of self-discipline. The seeds of some suits are planted by unguarded and frequently unwarranted remarks about another physician, based upon statements of the patient. And those statements are often the result of misunderstanding of what the other physician said or did. The place to criticize, if one believes the criticism justified, is through the proper channels of the Society, where there is some chance of establishing either the validity or untruth of the charges without subjecting an innocent member to a lawsuit. Just as there may be a few unscrupulous members of the medical profession, there are no doubt some unethical members of the legal profession, who file suit on the most flimsy grounds.

Wallace M. Yater

Editorials

THE PROBLEM OF THE HOPELESS CASE

Every physician is faced, not occasionally but frequently, with the care and disposition of the patient who cannot recover, and only too often the responsibility is also shared by a hospital. It may be commendable to assume a Pollyanna attitude and announce that no case is hopeless as long as life is present, but to be practical about it is quite another matter. Medical miracles are obsolete. The malignancies, diseases and accidents of the cardiovascular system and cirrhoses are examples of pathologic changes which are omens and forerunners of impending dissolution, and they convey two outstanding problems: the treatment and the care of the patient.

It has troubled the conscience of many physicians to choose the best course to pursue—whether to use every possible means to sustain and prolong life, at an expense far beyond the means of the patient or his family, or to assume that the humane course is to supply mental and physical comfort and permit the disease to progress without interruption. Few, if inclined, would follow the example of the young doctor in "Sorrell and Son," in which a merciful opiate hastened the end. Irrespective of his wishes, the physician is often urged to use every means possible to prolong life, and under such circumstances there is no second choice.

Many seriously ill patients have reached an age when they are no longer self-supporting, and if they have saved a sum for their declining years, the funds have been exhausted by hospitalization and medical care while the disease was in its earlier stages. By the time the victim of a fatal malady has become bedridden, he is then a burden to his immediate relatives, if he is fortunate to have a home. He is sent to an institution when no one is willing to assume the responsibility for his expenses more than a week or two. His unpaid bills mount, the visits of relatives and friends, if any, become fewer and fewer until he becomes a hospital derelict. This is not the chronicle of the indigent alone, but may be the saga of one of former affluence or one who has contributed much to art, literature, or science in his day, yet left to die "unwept, unhonored and unsung."

This is an ancient problem, and no remedy seems in sight. There is no law which compels one to be his brother's keeper, and no amount of legislation will alter human nature. Modern hospitals are almost fabulous in their structure and equipment, but the incurable or hopeless invalid is usually an unwelcome guest because he requires more than the routine care, he probably will become a liability, and he presents no scientific or interesting problem. It would appear that it is the duty of the municipality or the state to take equal care of the aged invalid as the acutely ill or injured, but the former are often shunted off to an institution where the nursing, treatment, and even the dietary and sanitary facilities are neither inspected nor graded by national medical organizations that have done so much to raise the standards of hospitals.

Would it not seem reasonable, among the hue and cry for funds for the many humanitarian organizations, to make some provision for those who have seen better days but are deprived of the privilege of passing away in comfort and peace?

C. S. W.

Opinions expressed in contributions to the Editorial Section are those of the writers and do not necessarily reflect the views of The Medical Society of the District of Columbia

ORTHODOXY AND HETERODOXY IN MEDICINE

The address by Professor D. Ewen Cameron of McGill, President of the American Psychiatric Association, which appears elsewhere in this issue, serves to emphasize certain truths which are fundamental to progress in science in general, and medicine in particular.

There are many facts yet to be discovered in all fields of science, and much investigation is being prosecuted. In general, research is encouraged, and new facts are welcomed as they are proved true. Yet it was not always so, and instances of the contrary situation are to be found in the not too remote past. One thinks, of course, of the almost hypnotic sway which was held for centuries by the anatomic, pathologic, and therapeutic dicta of Galen, and of the skepticism, not to say opposition, which was met by Vesalius and Harvey, for example. The French Academy of Medicine's contemptuous criticisms of the truths demonstrated so conclusively by Pasteur are less than a century old.

In certain fields of psychiatric therapy, as Professor Cameron indicates, we have seen methods and theories, first stated as almost revolutionary, become formalized and hardened into dogmas to such an extent as to inhibit further investigation and subject the deviant inquirer to castigation. It sometimes appears as if the innovator, in response to the doubts which may have met his proposals, tends, as his ideas gain acceptance, to surround himself with a hard shell of orthodoxy, thus discouraging others from making further innovations.

The scientific fact which will not stand inquiry or test is of dubious value, to say the least. If it is valid, its truth can be demonstrated as against the challenging proposal. New ideas, of course, should not be accepted merely because they are new; they should be tested in the light of current knowledge. But neither should they be rejected because they are new. Progress in science has always been, and will always be, made by those workers who are not content to accept the dicta of scientific authority, but who dare to question, to doubt, to let their speculations roam, to search for a better way. Medical science has achieved, and is achieving, a solid scientific base, thanks to the contributions of many devoted investigators. The building, however, though thoroughly grounded, is not completed. That completion will come about, if ever, through the work of the men and women who today may be looked on as the heterodox, but who may prove to be the orthodox of tomorrow.

W. O.

WASHINGTON HOME FOR FOUNDLINGS

The Washington Home for Foundlings, an institution in the Nation's Capital since 1887, has a program, a history, and a need which we hope will appeal to the members of the Medical Society of the District of Columbia.

Since 1945 the Home has devoted itself to the care of newborn babies. Today it is licensed to place babies in adoption. The care given the babies, the activities and thinking of our staff, the entire operation of the Home are all based on one underlying principle: Each newborn baby is an individual; as an individual the baby must be treated and permitted to develop according to his own potential. The mental, physical and emotional capabilities of each baby are studied and are the guideposts for individual handling.

Babies come to the Home from many sources. Many are placed there by mothers learning of the Home through the newspaper, the classified section of the telephone directory, maternity homes, their lawyers, or their physicians.

The typical case is the young, unmarried mother, alone in Washington, without funds, who does not seek a physician until delivery is imminent and who first learns of the Home from the doctor who attends her. Her condition has forced her to relinquish her job and her small savings are exhausted. The case worker from the Home describes to her the Home's method of caring for babies and she relaxes in the knowledge that the baby will have both thorough and tender care and that eventually the baby will be placed with a financially secure and well adjusted family. After returning to work the mother may voluntarily contribute funds toward the care of other babies even though she was unable to contribute anything to her own.

Sometimes the story is different—more complex. A local Washington physician delivered a baby 10 weeks prematurely. The baby weighed 3 pounds 3 ounces. Oxygen helped to keep the faint spark of life going during the first week of Johnny's existence. He was 5 weeks old before the physician felt that he was ready to leave the hospital. He advised, however, that this baby needed very special care.

The Washington Home for Foundlings accepted the infant. For the first four months Johnny did little but eat and sleep. He required unusual care and attention, and even more than the customary amount of tender, loving care. The staff at the Home refer to it as TLC. When the 4 months had passed Johnny had become a normal, happy baby. Today he is living with his adoptive parents, thriving, effervescent and affectionate.

The Home is telling its story to the people of Washington. From May 15 to June 15 the Home will be engaged in a drive for funds needed to carry on the important work it has been doing and will continue to do. The goal is $50,000, a substantial part of the total amount needed to staff and maintain the Home each year. Contributions should be mailed to the Washington Home for Foundlings, 4510 42nd Street, N.W., Washington 16, D. C., and may be directed for the attention of Miss Evelyn Hibbard, Director of the Home.

William S. Anderson, M.D.
Medical Director
C. K. Fraser, M.D.
Member, Board of Directors
Washington Home for Foundlings

THE WASHINGTON PSYCHIATRIC SOCIETY

When a professional group marks its fourth birthday, as the Washington Psychiatric Society did in February, it is ordinarily the custom to celebrate the event quietly, take stock soberly, and carry on unobtrusively.

However, there are certain features about this Society's rapid growth (from a mere idea to 300 members), its aims, its energy, and its achievements, which give it the temerity to defy the old saying, "Children (even 4-year-old children!) should be seen and not heard." Perhaps a brief case history of this rapidly growing "infant" may be of interest to our fellow physicians in the Medical Society.

After the end of World War II Washington found itself becoming an active center for psychiatric training, research, and practice. Training centers at Saint Elizabeths Hospital, Walter Reed, and Bethesda were attracting large numbers of young men both in and out of military service. Research projects were being carried on in the hospitals, the medical schools, and under private auspices. The number of psychiatrists in active hospital and private practice began to soar.

Unlike Gaul which was only divided into three parts, Washington psychiatry was then divided into four different societies, none of which was completely representative. The senior group was the Section on Neurology and Psychiatry of the Medical Society, whose membership was, of course, limited to members of the Medical Society. The Washington-Baltimore Psychoanalytic Society (now the Washington Psychoanalytic

Society) represented only a specialty within a specialty. The Society for the Advancement of Psychotherapy represented a small group of psychiatrists with specialized interests. The Medical Society of Saint Elizabeths Hospital restricted its membership to staff and alumni of that institution.

Each society, of course, had its own monthly or bi-monthly meetings, with much scurrying about and keen competition between the various program chairmen for the best available talent. As a result the meetings became so numerous, especially for those psychiatrists who belonged to two or even three of the above societies, and the quality of the programs so diluted that attendance began to drop alarmingly.

It was at this stage that a committee of Washington psychiatrists representing each of the existing societies met to study this vexatious problem. The members of this committee,* who were destined to become the "founding fathers" of the new group, proposed after much deliberation that a new society be formed, to be named The Washington Psychiatric Society. At its first meeting, on February 10, 1949, a constitution was adopted which opened membership to all doctors of medicine specializing in or having a particular interest in the field of psychiatry. Within a short time the society became a duly accredited Affiliate of the American Psychiatric Association, which has over 7,000 members. The stated purpose of the local group was "to represent psychiatry and foster its progress in the Washington area."

In what ways have these objectives been pursued? First, and foremost, the Society has succeeded in providing an outstanding scientific program. A list of the 40 or 50 speakers who have appeared would read like a "Who's Who in American Psychiatry." On several occasions the Medical Society's auditorium of 500 seats (where all the meetings are held) has been filled to near-capacity. An established policy of the society is that all scientific meetings are "open" and all physicians have always been welcome. Another important policy has been to establish and maintain the closest possible relations with the Medical Society of the District of Columbia, its sections, and its relevant committees in the interests of solidarity. By making many of its meetings "joint," i.e., under the combined sponsorship of two or even three societies, the total number of meetings has actually been reduced and the quality improved.

One of the earliest and most successful projects of the Society was its sponsorship and publication of "The Directory of Psychiatrists and Clinical Psychiatric Facilities in the Washington Area," which was originally conceived and carefully maintained by Dr. Henry Laughlin, the current President. This useful directory, soon to appear in its fourth edition, has proved well-nigh indispensable to local psychiatrists, social agencies, and many physicians.

An essay contest for psychiatric residents-in-training, sponsored by the Society in 1951 (and continued since then with the added inducement of a $100 prize), has produced some outstanding scientific papers. This contest, which is to continue as an annual event, has helped to stimulate and encourage psychiatric research among the younger members.

We have mentioned only a few of our more concrete achievements. Many other worthy projects have been completed, and many more are in progress. Perhaps just as important as accomplishments has been the establishment of an excellent *esprit de corps* in an organization which is now truly representative of all segments of Washington psychiatry.

We are dedicated to the principle that psychiatry is an integral and inseparable part of medicine. To this end we hope that an ever-increasing number of Medical Society members will avail themselves of our oft-repeated invitations to attend our scientific sessions.

We are grateful to the Medical Society for providing us with a splendid meeting place and for its perennially kind, indulgent, avuncular manner, which it demonstrates in so many tangible and intangible ways. On our fourth birthday we thank you, salute you, and look forward to many more years of happy symbiosis!

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* Dr. Addison M. Duval, Chairman; Drs. Norman Q. Brill, Henry P. Laughlin, Zigmond M. Lebensohn, Philip Litvin (now deceased), and Robert T. Morse.

Zigmond M. Lebensohn, M.D.

In and Out of Focus

BY THE OBSERVER

MSDC's Birthday

On April 1, 1953 Washington's Blue Shield Plan, Medical Service of the District of Columbia, celebrated its fifth birthday. Much satisfaction with the Plan's progress was expressed by the Service's officials, who took pardonable pride in calling attention to the following facts:

1. Enrollment, which was zero in 1948 when Medical Service was established, reached an impressive 370,000 in 1953. The Service enjoys the distinction of being one of the fastest growing plans in the country. It now ranks seventeenth in total enrollment among the 78 approved Blue Shield Plans in the United States, Canada, Hawaii and Puerto Rico.

2. On April 1, 1948, there were 751 Participating Physicians. Five years later the number had risen to 1,573.

3. Payments to physicians for services rendered subscribers increased from $1,209,000 in 1949 (the first complete year for which figures are available) to $3,200,000 in 1952.

4. Operating expenses, which at their high peak in 1948 were 14.5 per cent of subscription income, had dropped to 9.5 per cent in 1952.

As might have been expected, the Service's enviable record has attracted the attention of many leaders in the medical prepayment field. The Blue Shield Commission sent one of its members, Dr. Norman A. Welch, President of Massachusetts Medical Service, to the birthday celebration to present the Commission's service award "in recognition of the completion of its fifth year of service to the people of the District of Columbia." Dr. Donald Stubbs, President of the Service, accepted the award for his organization, and expressed his appreciation and the gratitude of members of the Board of Trustees and Participating Physicians.

Few physicians, even among Participating Physicians, realize the sacrifices made by their colleagues and interested laymen responsible for the conduct of the Service. They can truly be said to be dedicated to their tasks, which are, to say the least, often onerous. None among them has given more generously of himself than Dr. Frank D. Costenbader, first President of the Service, now a member of its Board of Trustees. No one not intimately familiar with Dr. Costenbader's activities will know how much time and thought he has devoted to what has become to him a cause.

To a somewhat lesser degree and yet beyond the call of duty have been the contributions of Dr. Charles Stanley White, Past President, and members of the Executive Committee and the Board of Trustees, which include: Dr. Stubbs, present President, Drs. William P. Herbst, Jr., Henry L. Darner, Arch L. Riddick, Maurice A. Selinger, James A. Dusbabek, G. Halsey Hunt, Daniel L. Seckinger, and Messrs. Bruce Baird, Philip M. Talbott and Theodore Wiprud. Mentioned, too, should be the unselfish devotion to their duties of succeeding Committees on Physicians' Services, who court the displeasure of their fellows when they decide adversely in the matter of fees.

No one can gainsay the fact that the best

Courtesy Evening Star

MEDICAL SERVICE WINS BLUE SHIELD AWARD

DR. NORMAN A. WELCH (left), Blue Shield Commissioner, presents the Commission's Anniversary Award to Medical Service of the District of Columbia in recognition of the completion of its fifth year of service to the people of the District of Columbia. DR. DONALD STUBBS (right), President of Medical Service, accepts the award. Looking on is THEODORE WIPRUD, Secretary of Medical Service.

laid plans would come to naught if they were not properly carried out by fulltime officials. Much credit is due Mr. F. P. Rawlings, Director of Group Hospitalization, which is charged with administering the Service, and Medical Service's Manager, George B. McGovern. Both are capable, conscientious executives. Naturally, the Board of Trustees of the Service have had closer ties with Mr. McGovern.

In your Observer's opinion, Mr. McGovern has a most promising future because he possesses qualities which are inherent in successful administrators. He is thorough, conscientious, and considerate of those with whom he has relations. Members of the Board have noted his growth in stature and speak of him in most favorable terms. The Service is indeed fortunate to have men of the caliber of Mr. Rawlings and Mr. McGovern on its staff.

What will the next five years hold for the Service? Dr. Stubbs says, "It should be possible to consolidate and strengthen the gains which have been achieved, and to give further emphasis to objectives yet to be fulfilled." Your Observer is among many Service supporters confident that these hopes will be realized.

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Health Museum for Washington?

As your Observer stated in last month's column, it is his belief that a new approach will have to be made in medical teaching and that in the future emphasis will undoubtedly be placed on audio-visual methods. He might have added that this statement was just as applicable to the education of the laity in health matters.

Our Medical Society has long recognized the effectiveness of audio-visual methods where the laity is concerned. Some seven or eight years ago it decided to sponsor a public health exhibit in connection with the ANNUAL SCIENTIFIC ASSEMBLY. Because of the limited space available at the Statler, the exhibit has of necessity been modest. Nevertheless, it has attracted so much favorable attention it has become a permanent feature of the ASSEMBLY. Plans for its expansion have long been under consideration. Eventually they will be realized, but even if they are, they will fall far short of the needs of the people.

What the Nation's Capital should have is a permanent health museum. Cleveland is far in advance of other cities, including our own, in this respect. An article entitled "The Cleveland Health Museum's Progress toward Patient Education" by Dr. Bruno Gebhard appeared in the December 20, 1952 issue of *The Journal of the American Medical Association.* Dr. Gebhard's views on health education of the laity and his "story" of the Museum's objectives and its accomplishments make inspirational reading.

Dr. Gebhard's article is too long to be quoted in full but the following excerpts may serve to stimulate reading of the complete text:

"A museum, or any other teaching institution," Dr. Gebhard observes, "is not made up of the buildings or its staff and exhibits but the working philosophy and the educational policy. Formerly, museums of hygiene or medical museums for the public were built around the subjects of medical science, and hygiene was seen as an organized defense against environmental forces: an outgrowth of the bacteriological discoveries of the last century. Today, in developing the Cleveland Health Museum, thought is centered around the normal growth and development of the human life from birth to old age. Most persons are healthy most of the time, and it is better health that is wanted, not just freedom from disease.

"Not at all times of their lives do persons have an interest in their bodies; but, out of experimentation, five learning situations for health education have been crystallized." These he lists as childhood, adolescence, adulthood, old age, and a period of poor health, enlarging upon each and what can be accomplished by lay education.

In describing the physical aspects of the Museum, Dr. Gebhard writes: "The museum exhibits include synoptic presentations on the different organic systems, with 'Juno,' the talking transparent woman, the best-known feature. In the intimate setting of the science theater, her 15-minute demonstrations highlight museum visits by both the average and the sophisticated visitor.

"About equal in attracting and holding interest are the exhibit rooms on 'The Wonder of New Life,' dealing with human reproduction, and 'Food for Health.' Almost 300 school groups, not only from Greater Cleveland but from all of Northern Ohio, make use of the special instruction classes conducted by members of the education department."

On a typical day (April 30, 1952) 457 persons viewed the exhibits or took part in some phase of the museum program.

"A museum naturally emphasizes the visual forms of education, but this does not exclude other forms of communication. Various AMA program packages have been scheduled frequently with the local radio stations; the series 'Doctor's Orders' was particularly well received. Live radio and television scripts are now in preparation, and the newsletter *Tone* keeps members and friends informed about current and coming events. A new series of health guide booklets for general consumption was launched this year with the publication of 'Juno—Symbol of All Women'; others will be concerned with human reproduction and with the latest exhibit 'We the People,' which dramatizes 1950 census figures on a '10-finger' basis.

"From time to time, the auxiliary medical services are portrayed. An exhibit 'What Nurses Do,' sponsored by the Ohio State Nurses Association, attempted to help in the reinstatement of student nurses. Schools of nursing, including those for practical nurses, take advantage of the guided tours and use the extensive health film library. Occupational therapists use the museum each year as the site for a comprehensive display showing what patients can do with their hands in protracted illness and during their days of convalescence."

". . . Perhaps the best measure [of the Museum's success] is the increase in annual attendance: from 30,000 visitors in 1941 to nearly 60,000 in 1951. Certainly this represents public acceptance of pleasing dimensions. . . .

"There is no doubt that the 600 member-physicians on many occasions are aware of the health museum in their dealings with patients. It has been written in a previous paper: 'One of the underlying goals of the Cleveland Health Museum's many and varied activities is perfect understanding and faith between doctors and their patients. For this reason, Museum exhibits go beyond biology into personal health, with special emphasis on the "positive" rather than on the "negative" side of living.'

"Based on an annual attendance of 60,000 visitors who spend an average of 1½ hours at the museum, the visiting hours amount to 90,000 yearly. If the 2,000 practicing physicians in the metropolitan area would divide this load into individual health counselling and lecturing to women's groups and civic organizations, each one would have to take on 45 museum visiting hours, or virtually the equivalent of a full work week.

"From a more general viewpoint, the value of a health museum was pointed out by a colleague from the British Isles who had spent some time with the museum: 'Only the patent medicine advertisers have followed this line before—they to prepare the public's mind for the inevitable mysterious illness, and you to prepare the public's mind by knowledge. It may very well be, if psycho-biological concepts are at all true, that by conditioning, health museums may alter the receptive terrain and, quite apart from their educational value, may reduce the susceptibility to various kinds of illness, notably those involving the autonomic and cardiovascular systems.'

"This observation by the British visitor confirms what has been said all along: seeing is both believing and relieving. To see makes one believe; to see the workings of the human body in 'do-it-yourself' three dimensional exhibits relieves the patient of the fears concomitant with disease and illness, and, over and above that, it arouses admiration for the miracle of the human body. Epitomizing the reason for the existence of the Cleveland Health Museum is this wall inscription from St. Augustine: 'Man wonders over the restless sea . . . the flowing waters . . . the sight of the sky . . . and forgets that of all wonders, man himself is the most wonderful.' "

While there is no one in evidence in Washington comparable in ability, experience and zeal to Dr. Gebhard, willing to devote himself wholeheartedly to the establishment of a health museum, he must be somewhere among us awaiting discovery. If he is sought diligently he will eventually—and let us hope soon—be found. Of all cities, Washington should have a health museum second to none and in the not too distant future.

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"Patients Are People"

The capacity audience which greeted the panel participating in the program, "Patients Are People—A Symposium for the Doctors' Office Staffs," presented in the Medical Society's auditorium on the evening of March 16, was a sight few members have been privileged to witness in recent years. Usually an audience of 200 to 250 is impressive enough to provoke favorable comment. On this occasion, not only was every available seat taken but many people were seated in the balcony. Such enthusiasm was naturally a stimulant to the "experts," who put forth their best efforts.

It cannot be said that the audience was a surprise to the Committee on Public Relations, which sponsored the Symposium. Hundreds of reservations poured in to the Society's Executive Offices the week following the mailing of the announcements.

On the day before the program was scheduled, the registration stood at 532. At this point the Committee became concerned as the seating capacity of the auditorium is only 476. Further registrations were refused, applicants being informed that the capacity of the auditorium had been reached.

The widespread interest in the Symposium became doubly apparent when the offices of national publications notified the Society that they were planning to send their best reporters to cover the event. Subsequently, *Newsweek* devoted more than a column to the program, quoting several of the speakers.

Carol Towner, Editor of the AMA's publication PR, called long distance from Chicago stating she planned to attend. Upon her return home, she evidently reported her impressions to Dr. George F. Lull, who incorporated them in his Secretary's Letter.

As there were some changes made in the program during the week before it was presented, here for the record are the topics and speakers: "Greeting the Patient," Dr. Josephine Renshaw, Chairman, Committee on Public Relations, The Medical Society of the District of Columbia; "Telephone Conversations," Charles L. Watkins, Commercial Representative, The Chesapeake and Potomac Telephone Company; "Problems in Ethics," Dr. Hugh H. Hussey, Chairman, Special Committee on Teaching Technics, The Medical Society of the District of Columbia;

"Patients' Accounts," Dr. Robert U. Cooper, member of Committee on Group Insurance, The Medical Society of the District of Columbia, and John C. Post, Professional Business Services; "The Blue Shield—Its Significance to Doctors and Patients," George B. McGovern, Manager, Medical Service of the District of Columbia; and "Common Complaints," Dr. Herbert P. Ramsey, President-elect, The Medical Society of the District of Columbia. Theodore Wiprud, Secretary of the Society, was the moderator.

There is reason to believe that the title of the Symposium had a great deal to do with its attraction to many people. Your Observer, who worked closely with Dr. Renshaw and her committee in planning the program, and who prides himself on suggesting arresting titles, would like to claim the credit for this one. However, the credit belongs to Dr. Renshaw, who has shown unusual aptitude for public relations work. This is fortunate, not only for the Society but for women physicians, because she is the first of her group to serve as a chairman of a standing committee of the Society.

One thing was definitely settled at the conclusion of the "Patients Are People" symposium. It will, with some modification, become an annual event.

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PR Which Brings Results

Among your Observer's friends in the medical profession there are few whose opinions on current medical problems carry more weight with him than do those of Dr. John Jones. Jones, of course, isn't his real name. That is withheld to avoid any embarrassment which the words credited to him might cause.

A week or so ago, Dr. Jones and his wife dropped in to your Observer's home for a visit. It was not long before the AMA came under discussion and here in essence is what Dr. Jones had to say about the Association's efforts to win public approval and support:

"By and large, I think the Association has improved its position in public esteem, although there is still considerable room for improvement. You appreciate, of course, that everything the AMA or its officials do affects its relations with the public. In other words, its efforts to win friends for medicine are not and cannot be confined to its Public Relations Department. Some AMA officials and department heads seem not to appreciate this fact for they have not been too judicious in their dealings with lay individuals and the public generally. In my opinion, they have been too concerned with what the other fellow has done or is doing. In other words, they stress too much the things they don't like about group clinics, medical coöperatives, corporate practice, and so on, rather than offering convincing evidence of the superiority of the system of medicine they espouse.

"They might profit by following the example of the automobile industry. In advertising the Cadillac automobile, for example, General Motors doesn't concern itself with the deficiencies of Ford's Lincoln. General Motors hammers away at the virtues of the Cadillac. One cannot imagine the company building up sales for Cadillac by pointing out the deficiencies of its competitor's product.

"The American Medical Association has something to sell; in fact, it has the best product of its kind in the world. If it cannot sell that product, the Association is wasting its time raising a storm about its opponent's offerings. People simply will not buy its product just because the other fellow's is no good."

Your Observer considered this simile a rather apt one and therefore passes it on to his readers.

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No Terminal Facilities

Nothing has a more withering effect upon audience interest than a lagging program. There is nothing new or startling about this observation; nevertheless, it seems to escape many who should be most aware of it. When these people get to their feet, time stands still and long after they have anything to say they go on and on.

There are others who must share the blame with long-winded speakers for slow-paced programs. They are the committees on arrangements who are under the delusion that a lengthy list of speakers is an essential ingredient of an impressive and successful program. Evidence of this fallacious belief is frequently observed at banquets where desperate listeners seek relief in somnolence.

Chairmen, too, are at fault because they fail to guide proceedings under their direction in an orderly but firm manner. They are either too lax or too occupied with what they have on their minds.

It would help immeasurably if chairmen were required to take a course in parliamentary procedure to qualify as presiding officers. What a blessing it would be to audiences which suffer through inexcusably tiresome meetings.

Here is an example of how not to preside: At a recent dinner in Washington attended by several hundred persons, the president of the organization sponsoring the event introduced the master of ceremonies with a great flourish. Whereupon, the MC proceeded for 45 minutes to reminisce about times past. Even the principal speaker, and there were a half dozen other speakers, called it a day at the end of 20 minutes.

There should be a law against lengthy introductions of speakers. Too often the chairman goes on and on and soon he has consumed as much time as the speaker he introduces.

Some medical organizations have dealt with this situation with a firm hand. An example is the Colorado State Medical Society. Your Observer was one of the guest speakers on its annual meeting program last September. He carefully timed his paper—at least, so he thought—before he left Washington. However, it became apparent when he was two thirds of the way through his presentation that he would not finish on time. When he asked the chairman if he might be permitted an extra two or three minutes he was refused. For the moment your Observer was taken aback. Later he realized how much the organization owed to whoever was responsible for instructing the chairmen to keep the speakers to their allotted time. Seldom has he seen a program run as smoothly as that one.

Members of our Society too become restive when forced to sit through unnecessarily prolonged programs. Your Observer remembers that when he first came to Washington signal lights had been installed on the lectern in the auditorium. By means of these lights the chairman indicated to the speaker when he was approaching the end of his allotted time and when he should stop. At some time during the intervening years a committee decreed that they should be abolished. It would seem wise to install those signals again permanently and succeeding chairmen instructed in their use.

There have been many complaints about lack of attendance at medical meetings. While there are many factors contributing to this situation, the lack of judgment shown in planning and presenting of programs is certainly a major one. Fortunately, it is a problem that can be readily remedied—but will it be?

"In and Out of Focus" *will be discontinued during the summer months. It will make its reappearance in the September issue.*

T. W.

ANNUAL REPORTS OF MEDICAL SERVICE OF THE DISTRICT OF COLUMBIA*

PRESIDENT'S REPORT

Five years ago today, Medical Service of the District of Columbia began operating as a community nonprofit instrument of physicians for making their services available to the people through voluntary prepayment. Therefore it is appropriate to review its entire life history rather than the last year only. The longer view of history is a more valuable guide to accurate judgment and sound planning for the future. Any elevation in this report stems largely from the fact that I stand on the shoulders of my distinguished predecessors, Dr. Frank D. Costenbader, who guided the Plan through its infancy, and Dr. Charles Stanley White, who was President during the stern struggle for financial security which is now largely achieved. My gratitude to them and to the other Trustees is great.

In 1948 it was fully apparent that the need to budget medical expense was growing, and was affecting an ever-increasing number in this as well as in other American communities. Physicians too came to appreciate more fully the advantage to all patients in offering such help, especially to many who might otherwise have been unable to pay, or able to pay only in part, for the advanced medical care which was in its entirety costing more and more even with relatively static physician fees.

In our nostalgic appreciation of the "good old days" it was easy to forget that the general practitioner, who embodied many of our ideals of professional conduct and position, was himself bound by a sense of duty and dedication in even a more restrictive fashion than we were beginning to be bound by other means under a more specialized and therefore more regimented modern economy. An imperceptible shift had placed countless new financial pressures on every patient to make prepayment a necessary answer.

The first objective of Medical Service, as stated in its Certificate of Incorporation, October 16, 1946, was to "inaugurate, operate and maintain . . . a Medical Service Plan . . . for the mutual benefit of its members and subscribers, all without profit to the corporation."

Through its Trustees, it was planned to offer these benefits not only on a nonprofit basis with the lowest possible operating costs, but to maintain complete freedom in the preservation of the patient-physician relationship, to control the source and manner of payment for medical services so that public confidence in the economic aspects of medicine would increase, and to build a system which by broadening the base of payment would aid the physician as well and without public hardship.

Freedom of the public to take it or leave it was their basic safeguard. The working safeguards for both physicians and public lay in the necessity that all Trustee decisions be a consensus of conscientious physician and public members.

Whether the Plan has fulfilled its early promise is best indicated by reviewing the activities of the first five years somewhat as outlined in my report to the Medical Care Committee of the District Medical Society two months ago, and which was published in the March issue of the MEDICAL ANNALS.

Highlighting this report are such facts as these:

1. Growth has been rapid.
    a. The number of Participating Physicians has increased from 751 to 1,573 (December 31, 1952).
    b. Patient participants have increased to more than 365,000 which is a satisfactory coverage for a plan in operation only 5 years.
    c. Physician payments now exceed 3½ million dollars a year.
    d. Operating costs have been consistently low. They were 14½ per cent in 1948, and now are below 9 per cent.
    e. Finances from a very precarious beginning are approaching a sound position although reserves must be increased. The improvement has been due to:
        (1) Early aid and business management by Group Hospitalization, our Blue Cross Plan.
        (2) Generous support by physicians during a period of prorated fees.

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* These reports were submitted by the President, Administrator and Chairman of the Committee on Physicians' Services, respectively, before the Fifth Annual Meeting of Participating Physicians of Medical Service of the District of Columbia, in the District Medical Society's Building, April 1, 1953.

(3) Constant preoccupation with these stern realities by Board and Administration.

2. Board control has been bold and decisive.
   a. Early benefit risks were assumed to give a rapid growth.
   b. Proration of fees was used to good advantage in a moment of dire need.
   c. Patient benefits were kept joined with subscriber costs.
   d. The continued importance of full service benefits has been recognized.
   e. Provision for individual enrollment has been made.
   f. Provision for in-hospital medical care and for increased participation and responsibility by all physicians in the area has been arranged.

3. General working morale has increased steadily. Willingness to make generous concessions to solve problems has enjoyed multilateral growth.

All of these factors, when summarized at the end of a five-year period, are certainly more impressive than when they were developing step by step. Our gratitude is very real for the tremendous effort by so many whose work has gone into this achievement.

It seems fair to say that the primary objectives of the Plan have been met.

What of the future?

In a practical world, current working purposes and objectives should grow and change with growth and change in the Plan.

In the Certificate of Incorporation referred to above, the second objective is, "To be of assistance and to coöperate in the promotion of such activities and/or organizations as are considered to be for the best interests of the community in relation to its medical service and public health." The first five years of growth and adjustment, with emphasis on securing financial stability, must be succeeded by a period of consolidation and education as to our mutual dependencies and responsibilities.

Medical Service is not just another insurance company; it is far more. Public support can be held only by:

1. Increasing coverage as rapidly as it can safely be done;
2. Increasing individual and catastrophic and chronic coverage;
3. Improving quality of coverage by coöperation of management, Participating Physicians, and the public, to enhance honestly the value of these services;
4. Maintenance of service benefits;

all on a nonprofit basis.

Although the physician's primary obligation is to his patient, and although Medical Service does not intrude between the two in an individual case, the long-range interest of both is best served by a strictly objective adherence to the standards set up for the Plan. It must be remembered that whenever, by the efforts of patient or physician, any payment is made improperly, this loss must be shared by all; but the greater loss will be to the morality which must guide such undertakings as this.

No double standard of morality will do here. It cannot be assumed that it is fair to "get something" from an institution, if possible, or that it is not *too* wrong for an institution to take a *little* advantage of an individual. In a truly coöperative enterprise the Golden Rule must apply not only between individuals but between any individual and his institution, which itself is only the sum total of all his fellows in this situation.

Conscientious physician function, then, must be to guard well not only the claims filed to see to it that none which is proper is neglected but to see to it that none which is improper is paid. Perhaps more importantly, it must be to maintain a deep concern for the quality of services for which benefits are paid and that they actually be proper physician services as required by contract. The public and all physicians must be guarded from incompetent or unscrupulous behavior by the occasional individual or institution. Such guardianship is largely the responsibility of the Participating Physicians. The Plan is powerless from the administration side alone.

However, the Plan can and should, under the second objective quoted, join with such groups as medical societies and lay subscriber groups to give information and guidance along these lines. The elevation of medical standards is important to us all. The problem is one of education. Based on proper information action will be suitable.

Such an expansion of our program will aid in maintaining the very proper separation of coverage fields which we have locally for Group Hospitalization and Medical Service while permitting the closest liaison between them in achieving their common objective of best patient care in the broadest sense.

This then is the physician's own Plan. His personal freedom in it will grow with his self control under a high morality. Since the morality of the profession is high, the benefit to the patient is assured. The development of these ideals of coöperative function is the goal of the next period for Medical Service.

DONALD STUBBS, M.D., *President*

REPORT ON ADMINISTRATIVE SERVICES

It is always interesting, and often revealing, to compare an organization's record for one year with that of a preceding year, and, in the case of Medical Service, a number of the predictions which have been made with regard to Medical Service's growth and progress are borne out by such a comparison.

PHYSICIAN PARTICIPATION

At the present time there are 1,591 physicians participating in Medical Service. A year ago there were 1,437 doctors participating in the Plan. The active support of many doctors who do not render the type of service presently covered by the Plan is evidence of the concern which the medical profession as a whole has with regard to the economic aspects of medicine. The Home and Office Program has encouraged more physicians to participate in Medical Service, and the proposed Medical Care Program will no doubt encourage even more. This does not mean that all doctors are satisfied with Medical Service, but it does seem that more and more doctors are becoming more and more aware of the value of Medical Service as an economic arm of the medical profession.

ENROLLMENT

As of December 31, 1951, Medical Service had 318,891 participants enrolled in the Plan and, at the end of 1952, there were 362,329 participants enrolled, a net gain of 43,438 participants for the year. In 1951, there was a net gain of 64,565 subscribers. While the number of new subscribers enrolled in 1952 was somewhat less than the number enrolled in 1951, this situation was not entirely unexpected since the cost of the family contract increased appreciably in 1952, and the number of potential subscribers is constantly reduced by the very success of our enrollment program in the past. At the present time, Medical Service ranks seventeenth in total enrollment among the 78 approved Blue Shield Plans, and second in the percentage of population enrolled.

In view of increased competition which has developed in the field of group coverage by commercial insurance companies, and considering the increased charge for the family contract, the enrollment gains in 1952 can be considered substantial. Our Enrollment Department established 261 new groups during the year and, in addition, arranged for the enrollment of new subscribers in established groups by making more than, 6,700 personal calls. They have worked hard, done a fine job, and they are to be congratulated.

CLAIMS MANAGEMENT

A total of 84,058 claims have been received for services rendered in 1952, an increase of 17,152 over claims for services rendered in the preceding year. For these claims, Medical Service paid $3,238,000 in 1952, an increase of $924,000 over the amount paid for services rendered in 1951. The claims expense per thousand was $20,247 in 1952, an increase of 24 per cent over the 1951 figure of $16,237.

The processing of 84,000 claims in a year (or 335 every workday) is an intricate and potentially expensive task, which is being carried out with the greatest efficiency consistent with understanding and equitable service.

The Executive Committee has a number of unusual cases to consider each time it meets. The Physicians' Services Committee has more. But, by selective screening of all claims, the unusual cases are kept to a minimum.

All claims received are first processed for payment status. If currently paid, they are screened for eligibility on the basis of the contractual provisions, and cases which are obviously questionable are deferred. The remaining cases move as a unit on through the usual auditing, coding and vouchering processes, and reach another level where they are given another eligibility check. Any that are still questionable are referred to a still higher level of authority for determination. If still undecided on this level, they may be referred to our Medical Advisor, or by him to the Physicians' Services Committee.

The bulk of these cases flow smoothly through to payment. Those that are divorced from the group are handled individually, with added detail involving correspondence, phone calls, checks for further information, search of records, and other time-consuming processes. It is the cost of handling this group of cases that is reflected, to a large extent, in the cost of administration, and the diversion of income which might otherwise be used for payment to physicians.

OPERATING COSTS

I am sure that every doctor participating in Medical Service is anxious to know that his Plan is being administered efficiently and economically. It is certainly the desire of the Administration to conserve the funds of Medical Service, and the record indicates that we are making a successful effort in this direction. In 1951, 10.79 per cent of the Plan's income was utilized for operating expenses; 9.52 per cent was used for this purpose in 1952. The average for all Blue Shield Plans in 1952 was 11.97 per cent.

Each year since Medical Service began operating, the percentage of income required to administer the Plan has been reduced, and it is especially noteworthy that the pattern has continued through 1952 in view of the administrative problems involved in changing from one contract to another. While the bulk of our subscribers changed to the new contract in March, a year ago, there were some who did not convert to the new contract until later. As a result it was necessary to administer the program under two separate contracts, two sets of fee tables, and two sets of income ceilings. At the present time, all subscribers who were participating under the old type contract are now participating under the new contract, and it is no longer necessary to determine which contract a participant has in order to determine which fee schedule is applicable. We realize that the doctor was faced with a similar dilemma in trying to determine what his charge would be to a patient who was subject to one or another of two income levels. Obviously, the successful transition from one contract to the other resulted in large part from the understanding coöperation of the doctors who initiate the claims. As in many other aspects of our administrative function, the trouble, delay, confusion, and cost are reduced to a minimum by the aid and assistance which doctors and their office staffs render to the Plan. I just want you to know that we appreciate it.

GEORGE B. MCGOVERN, *Administrator*

REPORT OF COMMITTEE ON PHYSICIANS' SERVICES

The original Constitution and By-laws of Medical Service established a Committee on Physicians' Services and outlined its functions in this manner, to wit: "The Board of Trustees shall appoint three Participating Physicians for a term of three years. The function of this Committee shall be to protect the interest of subscribers and the physicians. The Committee will review and approve payment of bills other than those of a routine nature submitted by physicians for services rendered to subscribers. It will review and adjudicate complaints involving patients and physicians." The Committee began functioning in 1948 with 3 members; it was later enlarged to include 6 Participating Physicians and was again enlarged in May, 1952 to a total of 9 physicians. In addition, the Board authorized the appointment of alternate members of the Committee, 8 of whom have been appointed, making really a committee of 17 physicians who are pledged to carry out the work of the Committee on Physicians' Services. In addition, Dr. A. Clagett Gray, the Plan's Medical Advisor, and Mr. McGovern and Mr. Carpenter of Medical Service are usually present at meetings.

The claims which are presented to the Committee for adjudication in most instances fall into one of these 5 categories: (1) establishing a fee for multiple surgical procedures performed by one or more surgeons at the initial operation or at different times and through the same incision or different incisions; (2) determining the preëxistence of an ailment, or, in other words, the eligibility of the subscriber to receive benefits from the Medical Service Plan during the first 10 months of participation; (3) reviewing problems involving complications of previously performed surgical procedures; (4) determining valid medical reasons for sterilization procedures; and (5) (an additional development) setting a just fee for a variation of a listed procedure, i.e., bunionectomy with tendon transplant. It is believed that this part of the activities of the Committee can best be explained by presenting under each of the above headings typical case abstracts and decisions, and how they were determined.

1. *Establishing a fee for multiple surgical procedures performed by one or more surgeons at the initial operation or at different times and through the same incision or different incisions.*

a. The patient had a recurrent left inguinal hernia, and a right hydrocele. The patient had had 2 previous repair operations and since there was no floor, a fascia lata transplant was required. In addition the surgeon performed the following procedures: (1) repair of inguinal hernia, direct and indirect; (2) repair of femoral hernia; (3) left orchidectomy; (4) excision of right hydrocele. The Committee decided that the surgeon was entitled to a fee of $170 for these procedures: $130 for fascial graft—unilateral inguinal repair with orchidectomy, and $40 for excision of hydrocele.

In arriving at this fee of $170 for the procedures outlined, the Committee felt that the surgeon was entitled to the full fee, as outlined in the Fee Table, of $130 for a unilateral inguinal herniorrhaphy with fascial graft and excision of testicle. In addition, he was allowed $40 for excision of the hydrocele, which is approximately one half of the fee established in the Table for a unilateral excision of hydrocele. This is in keeping with the general provisions of the Schedule of Fees for coverage when 2 or more procedures in separate fields are performed by the same surgeon.

b. The patient was admitted to the hospital, September 6, 1952, with metastatic carcinoma of the omentum, liver, umbilicus, and peritoneum. Two surgeons coöperated in performing a resection of the omentum and the umbilicus. The Committee suggested that each surgeon be allowed a payment of $50, and explained that the surgery performed was comparable to that required in a laparotomy.

Since the surgery performed was considered comparable by the Committee to that required in a laparotomy, it was considered just and right to divide the fee equally between the 2 Participating Physicians. To pay each surgeon a full fee for a laparotomy in this case would render the Plan vulnerable and encourage similar claims by others.

2. *Determining the preëxistence of an ailment, or in other words, the eligibility of the subscriber to receive benefits from Medical Service during the first 10 months of participation.*

In the following case the subscriber's contract was effective April 1, 1952, and the patient was admitted to the hospital, September 4, 1952, for removal of a lipoma of the right shoulder. According to the medical history received from the hospital, the patient had had a tumor of the right shoulder for 6 months prior to admission and it had been getting larger. This claim was rejected by the Claims Department. Afterwards a letter was submitted by the attending physician indicating that, according to the patient, her original statement was inaccurate and that she had made it without giving the matter enough thought. After reconsidering, she remembered that it was in July that she first noticed symptoms. The physician stated that fatty tumors of this type are of quick growth and that he did not think it could have been present for 6 months prior to admission. It was the opinion of the Committee that lipomas are slow-growing tumors and that this subscriber's lipoma was present prior to the Effective Date of the contract.

3. *Problems involving complications of previously performed surgical procedures.*

a. The patient underwent an abdominal exploration and appendectomy, June 5, 1952. There was a complete avulsion of the abdominal wound for which the surgeon performed a secondary suture, June 15, 1952. The surgeon was paid $100 (the fee for appendectomy) for the above procedures and registered a complaint on the basis of the time he had spent with the patient during his hospitalization from June 3 to June 29, 1952. It was the Committee's belief that the fee for the appendectomy should cover postoperative complications and that the surgeon should not be entitled to any additional fee for resuturing of the wound.

Benefits were denied in this case on the grounds that when a surgeon undertakes to perform an operation on a patient, he enters into a binding contract and he is obliged to care for the complications as part of the conditions of his contract.

b. In another case, the patient had a baby delivered, October 30, 1952. An hour and one half after delivery a consultant was called in and she removed a retained placenta. In this case the Committee suggested that the $80 fee for normal delivery be apportioned on the following basis: $60 for delivery and $20 for removal of retained placenta.

In this case benefits were allowed for the post-delivery complication because a second physician was called to manage the complication. In this type of case, the Committee feels that the second physician is entitled to reward for his efforts.

4. *Determination of valid medical reasons for sterilization.*

a. The patient had a bilateral tubal ligation and appendectomy, April 21, 1952, after a delivery of 5 days earlier. The reasons given for the sterilization procedure were "multiple pregnancy—poor home conditions." The Committee felt that no valid medical reasons had been advanced for the operation and decided that benefits should not be provided for it, nor for the appendectomy which was incidental to the sterilization procedure.

b. A sterilization procedure was performed on a patient for varicosities of the extremities which were recurrent after previous ligation and therapy. The Committee did not feel that the procedure had been done for valid medical reasons and requested that the claim be disallowed.

The Committee felt in both of these cases that reasons presented for the tubal ligations were not valid. Multiple pregnancy and poor home conditions in the first case and recurrent varicosities in the second are not considered suitable medical indications under our contract for bilateral tubal ligations. The incidental appendectomy was not advanced as a reason for performing surgery on the patient, and for this reason was not honored.

c. In another case, the Committee had requested additional information regarding the reason for the performance of a sterilization procedure. According to the attending physician, the patient has progressive muscular dystrophy, a hereditary condition. The Committee agreed that the condition is inherited and felt that the sterilization operation had been performed for a valid medical reason. The Committee authorized payment of the claim.

In view of the medico-legal aspects involved in sterilization procedures, the Committee is adamant in opposing claims for this procedure when it is not performed for valid medical reasons and authorized by recognized consultants.

5. *An additional development, setting a just fee for a variation of a listed procedure.*

An orthopedic surgeon performed a right bunionectomy with a sling procedure as described by Joplin. In submitting his report, the surgeon attached an operative record and stated that the surgical procedure involved is considerably more extensive than a simple bunion operation. He suggested that the Committee consider a higher fee for this procedure than for a routine bunionectomy.

In this case, the Committee decided that the orthopedic surgeon was entitled to a higher allowance than the usual fee of $75 for a bunionectomy on the grounds that the Joplin procedure is considerably more extensive than an ordinary bunionectomy since it involved a tendon transplant for the purpose of narrowing the foot. It was recommended that a total fee of $110 be paid for a Joplin procedure. This fee was based upon the full allowance for a bunionectomy and one half the fee for a tendon transplant. Prior to this ruling, the Committee was not in sympathy with claims rendered for a variation of a listed procedure which is covered in the standard Fee Table. Window dressing, a routine procedure for gaining larger fees, is not in accordance with the general feeling of the Committee. It is hoped that when the fee schedules are rewritten, corrections to cover additional developments will be outlined in the list to guide the Committee.

Miscellaneous

The following group of claims do not fall into any one of the aforementioned categories, but were considered sufficiently unusual to be worth presenting since they indicate the scope of the decisions which the Committee has been called upon to make:

a. The Committee was asked to give its advice on a problem which was later presented to the Board of Trustees. To illustrate the problem a specific case was read, in which a Participating Physician in submitting a claim for compensation explained that the surgery had been performed by a hospital resident under his direction. The Committee deliberated upon this problem at length and decided that payment should not be made to a Participating Physician unless he himself was present and responsible for the service. The Board of Trustees approved this decision and defined it as the future policy of the Plan in adjudicating similar claims.

b. In the next case presented to the Committee, the surgeon listed the following diagnoses: (1) incontinence; (2) urinary stress; (3) infection urinary tract, recurrent; (4) dyspareunia; (5) relaxed vaginal outlet with cystourethrocele and rectocele; (6) cyst of the left ovary with pelvic adhesions; (7) bleeding, postoperative. He performed the following procedures on the dates shown: (1) cystoscopy, retrograde pyelogram, bilateral; (2) examination under anesthesia, D & C, rupture of left ovarian cyst, biopsy of cervix, March 18, 1952; (3) A & P repair, left salpingo-oöphorectomy, lysis of adhesions, March 21, 1952; (4) ligation of bleeding vessel, anterior vaginal mucosa margin under anesthesia, March 21, 1952. The Committee suggested a payment of $25 for the cystoscopy, $125 for the salpingo-oöphorectomy, $35 for the A & P repair. The total payment will be $185. The Committee recommended that the case be referred to the Board of Trustees on the grounds that it represented unnecessary cost to the Plan since some of the surgery could have been performed at one time, in which case the surgeon would have received a smaller allowance. This case needs no comment. In the minds of the Committee members, the case represented unnecessary cost to the Medical Service Plan.

SUMMARY OF THE YEAR'S ACTIVITIES

From January 1952 through December 1952, the Committee met ten times and reviewed 317 cases. An average of 6 physicians attended the meetings. In addition, Dr. Gray and Mr. McGovern and/or Mr. Carpenter were present. The average meeting lasted 3 hours. If we consider an 8-member panel meeting 10 times for 3 hours at a time, you would have 240 hours spent during a year in a review of 317 cases by the Physicians' Services Committee. This represents a good many physician-hours devoted to an important part of the Medical Service Plan in the District of Columbia.

The Chairman wishes to acknowledge the untiring efforts of the other members of the Committee, the guidance and direction given by Mr. McGovern, and wishes to pay an extra tribute to Dr. A. Clagett Gray for his unstinted and long hours of labor as his contribution to the work of the Committee.

J. KEITH CROMER, M.D., *Chairman*

CALENDAR OF SPEAKERS

The following members of the Medical Society of the District of Columbia have addressed lay groups during the past several weeks. The Society maintains a Speakers Bureau, sponsored by the Committee on Public Relations, through which requests for speakers for lay groups, including radio programs, can be filled.

Date	*Speaker*	*Subject or Title*	*Organization*
March 16	Dr. Addison M. Duval	Emotional and Mental Health Problems of Elementary School Children	Staunton Parent-Teachers Association
March 18	Dr. Emil J. C. Hildenbrand	The Plant and Store Medical Program in Operation	Industrial Nurses of the Liberty Mutual Insurance Company (Baltimore)
March 20	Dr. Leonard A. Scheele	Multiple Sclerosis	District Shriners
March 22	Dr. Herbert P. Ramsey	Comments on article from *Ladies Home Journal*, "Can We Trust All Our Doctors?"	TV (Dumont)
March 23	Dr. Addison M. Duval	Mental Health — Yours and Mine	Sousa Junior High School Parent-Teachers Association
April 1	Dr. Warren D. Brill	Washington Heart Association	Anacostia Lions Club
April 8	Dr. Henry R. Wolfe	Poliomyelitis	Chillum Elementary School Parent-Teachers Association

News and Personals

The American Medical Association has issued its official call inviting officers and members to attend the **102nd Annual Meeting of the Association** in New York, June 1–5, 1953.

The General Headquarters, Scientific and Technical Exhibits, and Information Bureau will be located in the Grand Central Palace, 480 Lexington Avenue. The House of Delegates will convene in the Grand Ballroom of the Waldorf-Astoria Hotel. The Grand Ballroom of the Commodore Hotel will be used for the Inaugural and General Scientific meetings.

It is expected that Washington will be represented with a large delegation of physicians. Present in official capacity for meetings of the House of Delegates will be Dr. Wallace M. Yater, President of the Medical Society; Dr. Herbert P. Ramsey, President-elect; Drs. Hugh H. Hussey and Raymond T. Holden, delegates to the AMA; Theodore Wiprud, Secretary of the Society; and Lawrence A. Zupan, Assistant Secretary.

Those who cannot attend the convention can see and hear highlights of the meeting via radio and television. Inauguration ceremonies for President-elect Edward J. McCormick will be held on Tuesday, but since radio and television will cover the coronation of Queen Elizabeth II of England the same day, the AMA inaugural ceremonies will be rebroadcast on Wednesday evening, June 3.

In television areas, the half-hour "March of Medicine" program, originating at the Scientific Exhibit in New York's Grand Central Palace, will be presented either Thursday or Friday evening. This television coverage will be sponsored by Smith, Kline and French Laboratories.

The Fifth Annual Convention of the International Academy of Proctology will be held at the Plaza Hotel, New York City, May 29, 30 and 31, directly preceding the AMA meeting.

Washington physicians are contributing a number of scientific papers to this meeting. They are:

"Clinical and Pathological Study of Rectal and Sigmoid Polyps," Dr. Jacob J. Weinstein, Associate in Surgery, George Washington University School of Medicine

"Causes, Prevention and Treatment of Injuries to the Anus and Rectum during Delivery," Dr. Samuel M. Dodek, Assistant Clinical Professor of Obstetrics and Gynecology, George Washington University School of Medicine

"Anesthetic Problems and Complications in Anorectal Surgery," Dr. William E. Bageant, Chief of the Department of Anesthesiology, Garfield Memorial Hospital

"Serial Serum Cholesterol Determinations in Acute, Fulminating, Nonspecific Ulcerative Colitis, and Their Relationship to Prognosis and Therapy," Dr. Eugene S. Gladsden, Clinical Instructor in Medicine, George Washington University School of Medicine

"Factors that Contribute to Lower Mortality in Colon Surgery," Dr. Charles S. White, Head of the Department of Surgery, Doctors Hospital

"Management of Diabetes Before, During and After Anorectal and Colon Surgery," Dr. Maurice Protas, Associate in Medicine, George Washington University School of Medicine.

The meeting this year will be extended to include a Surgical Clinic and Seminar at Jersey City Med-

IMPORTANT NOTICE TO AMA MEMBERS

Have you paid your AMA dues?

To facilitate registration at the AMA's Annual Session in New York, June 1–5, advance registration cards have been issued to members which will eliminate their waiting in line to have their names checked against the membership roster.

To register it is necessary for you to have a pocket card showing your membership dues in the AMA paid for 1953. If you have not already sent in your check to cover 1953 dues to the Executive Offices of the Medical Society of the District of Columbia, 1718 M Street, N.W., Washington 6, D. C., we suggest that you do so at once, in order to give us an opportunity to forward the payment to the AMA in time to get a pocket card returned to you. An advance registration card will also be mailed to you from the AMA office.

THEODORE WIPRUD
Treasurer

ical Center under the direction of Dr. Earl J. Halligan. The "Wet Clinic" and Seminar will be held on May 28. An extensive Motion Picture Seminar of Proctologic Surgery (including office technics) will be featured on May 31. There is no fee for attendance. All physicians interested in proctology are invited to attend these meetings. The complete program may be obtained by writing to the Executive Offices of the Academy, 43-55 Kissena Boulevard, Flushing, New York.

The 19th Annual Meeting of the American College of Chest Physicians will be held at the Hotel New Yorker, May 28–31.

Dr. Roy G. Klepser, Associate Professor of Thoracic Surgery, Georgetown University School of Medicine, and Dr. James F. Berry, of the Naval Medical Corps, will present a paper on "The Diagnosis and Management of Chylothorax" at the general scientific session, May 28. Dr. J. Winthrop Peabody will be Chairman for the Scientific Session, May 29.

Dr. Charles A. Hufnagel, Professor of Experimental Surgery, Georgetown University School of Medicine, and Dr. James J. Feffer, Associate in Medicine, George Washington University School of Medicine, will participate in round table luncheon discussions, May 29. Dr. Hufnagel will describe the substitute heart and/or lung; Dr. Feffer will be one of several to discuss the influence of the location of the disease on the therapy of pulmonary tuberculosis.

In a scientific session devoted to tuberculosis, May 31, a paper on "Isoniazid in Tuberculous Meningitis" will be presented by Dr. Mark H. Lepper, Associate Professor of Medicine, University of Illinois at Chicago, an Associate member of the District Medical Society. Co-authors of the paper are Drs. Harold W. Spies, Norman H. Blatt and Harry F. Dowling, all of Chicago. Dr. Dowling was for many years an Active member of the District Medical Society.

Dr. Edward J. Beattie, who left Washington only recently to become Assistant Professor of Surgery at the University of Illinois in Chicago, will speak on "Pulmonary Edema, Etiology and Therapy" in a Symposium on Postoperative Management in Thoracic Surgery, May 31.

The American Therapeutic Society, which is holding its Annual Meeting at the Hotel Biltmore in New York City, May 28–31, is featuring in its scientific program a Symposium on Tobacco, with Dr. Arthur C. Degraff of New York as moderator. Dr. Oscar B. Hunter, Jr., Secretary of the Society, states that guests are welcome to attend the scientific sessions.

The First International Convention of X-ray Technicians will be held at the Royal York Hotel, Toronto, Canada, June 28 July 2, 1953. The convention is being sponsored jointly by the American Society of X-ray Technicians and the Canadian Society of Radiological Technicians. Program information may be obtained by writing Genevieve J. Eilert, R. T., 16 Fourteenth Street, Fond du Lac, Wisconsin.

The West Virginia Academy of General Practice is holding a two-day Scientific Assembly in Charleston, May 16 and 17, at the Daniel Boone Hotel. Among the 12 out-of-state guest speakers is **Dr. James A. Watts,** Professor of Neurosurgery, George Washington University School of Medicine. Dr. Watts will speak on "Involutional Melancholia" during the afternoon session, May 17. A complete program may be secured by writing to Dr. Halvard Wanger, Box 175, Shepherdstown, West Virginia. Hotel reservations should be made directly with the Reservation Manager of the Daniel Boone Hotel.

The Medical and Surgical Staff of Episcopal Eye, Ear and Throat Hospital will hold an open meeting in the Medical Society's auditorium, Friday evening, June 5, beginning at 8:15 p.m. Dr. Robert M. Hosler, of Cleveland, Ohio, will be the guest speaker. He will discuss "Emergency Treatment of Cardiac Arrest in the Operating Room." Members of the Medical Society are invited to attend this meeting.

A Postgraduate Symposium on the Basic Sciences Related to Anesthesiology will be presented by the Department of Surgery of the University of Pittsburgh School of Medicine in coöperation with the Departments of Anesthesiology of the St. Francis, Allegheny General, and Mercy Medical Center Hospitals, June 8–12, 1953. The registration fee

CALENDAR OF MEETINGS, MARCH 16–APRIL 15, 1953

March 16	Symposium for Doctors' Office Staffs
March 17	Midwinter Seminar
	Grievance Committee
March 18	Midwinter Seminar
March 19	Midwinter Seminar
March 20	Board of Censors
	Washington Psychoanalytic Society
March 23	Executive Board
	Committee on Radio, TV and Motion Pictures, Annual Scientific Assembly
March 24	Committee on Public Health
March 25	Section on Radiology
	Washington Psychoanalytic Society
March 26	Executive Committee, Health Section, United Community Services
March 27	D. C. Chapter, American Federation for Clinical Research
March 30	District of Columbia and Potomac Societies of Anesthesiologists
March 31	Grievance Committee
April 1	Executive Board, Woman's Auxiliary
	Medical Service of D. C.
April 2	Committee on Public Policy
	Section on Neurology and Psychiatry
	Executive Committee, Gallinger Hospital
April 6	Physician-Veterans of World War II
	Washington Orthopedic Club
April 7	Committee on Medical Ethics and Deportment
	American Academy of General Practitioners
April 8	Woman's Auxiliary
	Subcommittee on Alcoholism
	Subcommittee on Mental Health
April 14	Committee on Public Relations
	Committee on Group Insurance
	Medical Officers' Reserve Units
April 15	Arbitration Committee
	Washington Psychiatric Society
	George Washington University Medical Society

will be $25. The course will be limited to 50 participants. Full particulars may be obtained from the Chairman of the Committee on Graduate Medical Education, University of Pittsburgh School of Medicine, 3941 O'Hara Street, Pittsburgh 13, Penna.

Dr. C. K. Fraser, Chairman of the **Obstetrical Board,** reminds physicians who may be interested in attending meetings of the Board to write or telephone the Executive Offices of the District Medical Society, District 7-3111, and request to be placed on the mailing list for notices of meetings.

The Executive Board of the Medical Society of the District of Columbia met in regular session, March 23. Dr. Alfred E. Brigulio was appointed to succeed Dr. William D. Claudy as Chairman of the Committee on Emergency Medical Service. Dr. Claudy resigned the chairmanship of this committee when he was called to active military duty. President Yater also submitted the name of Dr. Carl Berg to succeed Dr. Milton C. Cobey as a member of the Classification Committee. The Board approved both appointments.

Dr. Raymond T. Holden made a brief report to the Board on the special session of the House of Delegates of the AMA, held at the Hotel Statler on March 14.

The Secretary reported that he had resigned as Co-chairman of the Medical Advisory Committee to the Civil Defense Organization in the District of Columbia, due primarily to the apathy shown by Congress toward civil defense and the inadequacy of the funds available for the medical program.

The Washington Academy of Surgery held a scientific meeting and election of officers at the Kennedy-Warren, April 13. Dr. J. Hartwell Harrison, Assistant Professor of Genitourinary Surgery, Harvard University Medical School, gave an illustrated lecture on "Experience in Bilateral Adrenalectomy." More than 150 members and guests were present.

Following the scientific session a business meeting was held and the following officers were elected for 1953–54:

> Dr. George K. Nutting, *President*; Dr. W. Ross Morris, *Vice President*; Dr. Duane C. Richtmeyer, *Secretary-Treasurer*; Drs. Harry Lee Claud, Robert E. Moran, and Edwin C. McNamara, *members of the Council for two years.*

This was the last meeting of the season. The next meeting will be held in the early fall.

HONOREES AT GEORGE WASHINGTON UNIVERSITY ALUMNI LUNCHEON

Dean Elmer Louis Kayser (right), President of the George Washington University Alumni Association, presents citations to 7 members of the faculty who have been on the staff 25 years at a General Alumni Luncheon, March 21. Left to right, they are: Dr. Lawrence L. Cockerille, Professor Donald C. Kline, Dr. Maurice Protas, Dr. Daniel B. Moffett, Dr. Herbert P. Ramsey, Miss Myrna P. Sedgwick, and Dean Walter A. Bloedorn. A citation was made *in absentia* to Dr. Harry Ford Anderson, who was out of the city.

The Medical Society of Saint Elizabeths Hospital held its **16th Annual Meeting,** April 10 and 11, in the Geriatric Building of the Hospital. Presiding officers for the various sessions were Drs. Norman Taub, Edgar B. Griffin and Morris Kleinerman.

Members of the District Medical Society who presented papers for the meeting were Drs. Otis R. Farley, George W. Sprehn, Arcangelo R. T. D'Amore, Ben Karpman, Leon Salzman, and Paul Chodoff. Among the discussants of papers were Drs. Milton Gusack, Francis J. Tartaglino, Harry J. Myers, David Eden, Edward M. Ohaneson, Stanley L. Olinick, and Norman Taub.

The final afternoon session was devoted to a symposium on What I Expect from Psychiatry, with Dr. Leon Yochelson as moderator. Expressions from the viewpoint of their various professions were made by: Mr. Norman J. Nelson, Associate Superintendent, District of Columbia Schools (Educator); Mr. George M. Pikser, Director of the Jewish Social Service Agency of Washington (Social Worker); Dr. R. Bretney Miller, of the Department of Medicine, George Washington University School of Medicine (Internist); and Mr. James V. Bennett, Director of the Federal Bureau of Prisons (Prison Administrator). Replies were made to each specialist in turn by Drs. Addison M. Duval, William L. Granatir, Leon Yochelson, and Bernard A. Cruvant, respectively.

Dr. Winfred Overholser, Superintendent of Saint Elizabeths Hospital, gave the closing address, April 11. Dr. Overholser was also host at a buffet supper, April 10, for members and guests. The two-day meeting ended with a dinner dance at the Wardman Park Hotel.

Eight members of the faculty of George Washington University, each of whom has given 25 years of teaching service to the University, were honored by the University Alumni Association at a luncheon in the National Press Club ballroom, March 21. About 250 persons were present. Dr. Cloyd Heck Marvin, President of the University, gave the principal address. Dr. Elmer Louis Kayser, President of the Alumni Association, presented each one with a scroll. The honorees were: Dr. Walter A. Bloedorn, Dean of the School of Medicine; Dr. Harry Ford Anderson, Professor of Dermatology and Syphilology; Dr. Lawrence L. Cockerille, Assistant Clinical Professor of Obstetrics and Gynecology; Dr. Daniel B. Moffett, Professor of Otolaryngology; Dr. Maurice Protas, Associate in Medicine; Dr.

Herbert P. Ramsey, Clinical Professor of Obstetrics and Gynecology; Miss Myrna Pauline Sedgwick, Administrative Secretary of the University; and Donald C. Kline, Professor of Art.

The Question Hour, sponsored by the Medical Society's **Committee on Teaching Technics** for residents and interns at Gallinger Municipal Hospital, April 9, received an enthusiastic reception from an audience numbering about 80. Theodore Wiprud, Secretary of the Medical Society of the District of Columbia, was moderator. Panel participants were Dr. Hugh H. Hussey, Editor of GP and Associate Professor of Medicine, Georgetown University School of Medicine; Dr. Frank E. Wilson, Director of the Washington Office of AMA; Dr. Robert U. Cooper, surgeon and author of "Investments for Professional People"; Mr. Warren E. Magee, Legal Counsel for the Medical Society of the District of Columbia; and Mr. Paul Foley, Assistant Secretary of the Commission on Licensure, District of Columbia Health Department.

Panel participants answered questions on office management, medico-legal problems, licensure, investments and finance, organized medicine, and medical socio-economic problems for the scheduled hour of meeting, 1 to 2 p.m., and until Mr. Wiprud brought the meeting to a close at 2:30 p.m.

The Washington Society of Pathologists held its regular meeting, April 7, at the Army Medical Service Graduate School of Walter Reed Army Medical Center. Dr. Clift Berger, of Sibley Hospital, presented some interesting cases. Two papers were read before the meeting: "The Hypothalamic-Hypophyseal System and Inquiry into Possible Sites of Anti-diuretic Hormone Formation," Dr. G. L. Laqueur, of the National Institutes of Health; "Diffuse Papillomatous Polyp (Villous Tumors) of the Rectum and Sigmoid," Dr. E. R. Fisher, also of the National Institutes of Health.

The Section on Neurology and Psychiatry met in the Medical Society's Library, April 2. Two papers were presented at this meeting: "Tuberous Sclerosis," Drs. Jorge Huertas, Harold Stevens and James W. Watts; "Poikilothermic Reaction in Neurosyphilis," Drs. Edward J. Pacious and George Weickhardt.

The George Washington University Medical Society met in the Medical Society's auditorium, April 15. Dr. Lloyd G. Lewis, Professor of Urology, Georgetown University School of Medicine, addressed members and guests on the subject, "Testicular Neoplasms."

The Washington Medical and Surgical Society met on April 27 at Hotel 2400. Dr. Francis J. Murray presented a paper on "Value and Use of Control Studies in Clinical Investigation," which was discussed by Drs. Laurence H. Kyle, Frederic G. Burke, and Joseph M. Barker. A case report was presented by Dr. Harold Heiges.

Dr. Charles S. White, Jr. was host to the **Hippocrates-Galen Society,** April 2, at the Chevy Chase Club. Dr. Charles W. Jones was the essayist for the scientific program; the title of his paper, "Addison's Disease." Dr. Harold H. Hawfield gave a case report on "Mesenteric Cysts."

Howard University School of Medicine sponsored its **Second Annual Psychiatric Seminar,** March 27 and 28, in the School Auditorium under the chairmanship of Dr. E. Y. Williams, Head of the Division of Neuropsychiatry. Five guest speakers addressed the Seminar, which was open to physicians and medical students. Guest lecturers and the topics they presented were:

"Emotional Problems Encountered in the Chronically Ill Child," Dr. Reginald S. Lourie, Children's Hospital

"Cerebro-vascular Accidents," Dr. Francis M. Forster, Georgetown University School of Medicine

"Role of Psychiatry in Industry," Dr. Dale Cameron, U. S. Public Health Service

"The Psychoanalytic Approach as a Method of Therapy in Psychiatry," Dr. Seymour J. Rosenberg, Georgetown University School of Medicine

"Participation of Psychiatrists in Court Hearings," Dr. Bernard Cruvant, Saint Elizabeths Hospital.

Six members of the District Medical Society participated in the one-day **Cancer Symposium** at the Hotel Statler, March 24, sponsored jointly by the Graduate Nurses' Association and the District Division of the American Cancer Society.

Dr. Peter D. Comanduras, Associate Professor of Clinical Medicine, George Washington University School of Medicine, gave the keynote address on "Cancer—the Problem Today."

Dr. Murray M. Copeland, Professor of Oncology, Georgetown University School of Medicine, was moderator for a panel discussion on the Treatment of Cancer. Panel participants were Dr. Ralph M. Caulk, Senior Associate Radiologist at Garfield Memorial Hospital; Dr. Calvin T. Klopp, Director of the George Washington University Cancer Clinic; and Dr. Charles E. Rath, Clinical Instructor in Pathology, Georgetown University School of Medicine.

Dr. Brewster Miller, Director of Professional Education of the American Cancer Society, was the luncheon speaker. He spoke on "Cancer—Research Today." The meeting closed with an evening session which featured a panel discussion on How Would You Solve These Problems. Marjorie Schlotterbeck was moderator. Taking part in the discussion were Dr. Josephine J. Buchanan, Chief of Physical Medicine and Rehabilitation at Gallinger Municipal Hospital; Dr. Cyril Schulman, Director of the Home Care Program of George Washington University Cancer Clinic; Miss Frances Michella, staff nurse of Providence Hospital; and Mrs. Frances Gable, public health nurse.

At the Annual Meeting of the Board of Trustees of **Group Hospitalization, Inc.,** in the Washington Hotel, March 27, Joseph H. Himes was reëlected President. Mr. Himes is the country's senior Blue Cross executive in point of service, having served as President of GHI since its establishment in 1934.

Mr. Himes advised the trustees that GHI has been reapproved by the Blue Cross Commission of the American Hospital Association for 1953 "without qualification." More than 534,000 persons in the Washington Metropolitan Area are now covered under GHI, he reported.

Other officers reëlected at the annual meeting were: Alfred G. Neal, First Vice President; Charles R. Drayton, Second Vice President; Dr. Walter A. Bloedorn, Secretary; Bruce Baird, Treasurer.

Appointed to the Board of Trustees were Dr. Paul Kiernan, Associate Professor of Surgery, Georgetown University School of Medicine, and H. L. Rust, Jr., President of the H. L. Rust Company.

A Symposium on Recent Advances in the Study of Venereal Diseases was held under the auspices of The Experimental Therapeutics Study Section of the National Institutes of Health, Public Health Service, in conjunction with the 15th Annual Session of the American Venereal Disease Association, April 30 and May 1. The meetings were held in the auditorium of the Federal Security Building.

Dr. Leonard A. Scheele, Surgeon General of the Public Health Service, extended greetings to the assembled members and guests at the opening session, April 30. At the scientific session, May 1, which was devoted to a study of minor venereal diseases, a paper was presented on "The Treatment of Gonorrhea with Erythromycin," co-authored by four members of the District of Columbia Health Department, namely, Drs. G. Roland Gable, M. J. Isaacson, Monroe J. Romansky, and S. Ross Taggart.

MAJOR GENERAL LEONARD D. HEATON, MC, USA
New Commandant of Walter Reed Army Medical Center

CAT.

Major General Leonard D. Heaton, MC, USA, assumed command of **Walter Reed Army Medical Center** on April 1. He succeeds **Major General Paul H. Streit, MC, USA** who retired from Army service on March 31.

General Heaton was Commanding General of Letterman Army Hospital in San Francisco, Calif., from July 1950 until he received his new assignment at Walter Reed. He received his degree in medicine from the University of Louisville, Louisville, Kentucky, in 1926, and received his Regular

Commission as a First Lieutenant in the Medical Corps in 1927.

At the time of the attack on Pearl Harbor in December, 1941, General Heaton was Chief of Surgical Service, North Sector General Hospital, Schofield Barracks, Hawaii. He was awarded the Legion of Merit for his handling of the wounded at that time. In November, 1942 he transferred to Woodrow Wilson General Hospital, Staunton, Virginia. He was then placed in command of the 160th General Hospital at Atlantic City, N. J., and took that unit to Europe in March, 1944. When he returned from overseas in November, 1945, he became Chief of Surgical Service of Letterman Army Hospital.

General Heaton is a diplomate of the American Board of Surgery, a Fellow of the American College of Surgeons, and a member of the American Medical Association, the California Academy of Medicine, the San Francisco (Calif.) Surgical Society, and the Pacific Coast Surgical Association.

When he retired on March 31, General Streit had completed almost 36 years of continuous military medical service. Some of the projects carried to completion at Walter Reed during his incumbency were a new outpatient clinic, a modern eye clinic, a new obstetrical ward, a post theater and a new admitting office. Prior to assuming the key medical position at Walter Reed on January 15, 1949, General Streit was Commanding General of Brooke Army Hospital, San Antonio, Texas, for three years.

During World War II General Streit was changed from professional assignments to command and administrative duties. The first such duty was as Commanding Officer of the 147th General Hospital in Hawaii until 1943, when he was appointed Chief Surgeon of the Central Pacific Base Command.

General Streit was overseas in World War I as a battalion surgeon with the 87th (Acorn) Division. Before returning to the United States he served as a member of the American Typhus Relief Expedition to Poland during 1919 and 1920. For his work with the expedition, which was engaged in controlling a severe epidemic of typhus, he was presented with the Commemorative Cross of Poland.

At the outbreak of the Korean conflict, he directed the organization of medical research teams that worked as a unit near the fighting lines in order to collect invaluable data and statistics in such entities as epidemic hemorrhagic fever and vascular surgery.

He is a diplomate of the American Board of Otorhinolaryngology, the first Army physician to be certified by that Board. He is a Fellow of the Ameriican College of Surgeons, and a member of the American Medical Association.

General and Mrs. Streit plan to make their home in Washington, residing presently at 4721 Falstone Avenue, Chevy Chase, Maryland.

Dr. Norman Q. Brill has moved to California to accept a position with the University of California at Los Angeles, where he will head a coördinated program in mental hygiene sponsored by the UCLA Medical Center and the State Department of Mental Hygiene. He will serve as Chairman of the Department of Psychiatry at the Medical Center and as Director of a State Department of Mental Hygiene unit.

The program which he is heading will be divided into two parts. One portion, that of the Medical Center, will be primarily directed toward undergraduate professional training and basic research, and will be integrated with other campus projects. The other portion, in the State Department unit, will include postgraduate professional training, study of the problems of inpatients and outpatients, pilot studies for institutional application and clinical research.

During the latter part of World War II, Dr. Brill became Deputy Director of the Neuropsychiatry Consultants Division of the Army Surgeon General's Office. He was Professor and Director of the Department of Neurology at Georgetown University School of Medicine from 1946 to 1950.

Children's Hospital announces the opening, March 15, of an **Electroencephalographic Laboratory** on the fifth floor of its new wing at 2125 13th Street, N.W. The laboratory will be under the direction of Dr. Harold Stevens.

Encephalogram appointments for private patients may be made by telephone through Miss Martha Schorre, electroencephalographic technician. Ward cases will be given appointments through Miss Hazel A. Royer, Administrator of the Outpatient Department.

This new laboratory was made possible by the

Alcohol Beverage Industry of the District of Columbia, which is sponsoring the Neurological Clinic of the Hospital.

Dr. Thomas S. Lee, Washington's first cardiologist and one of the first doctors to specialize in cardiology in the United States, received a medal and High Citation Certificate from the American Legion, March 16, for his work with the Washington Heart Association.

Dr. Lee founded the Washington Heart Association in 1927 and is its permanent Honorary President. The son of a prominent gynecologist, Dr. Lee graduated from Harvard University in 1891 and from the College of Physicians and Surgeons of Columbia University in 1894. For many years he lectured in the Department of Cardiology at George Washington University. He is presently Emeritus Professor of Cardiology of Georgetown University. He is still Chief of the Cardiac Clinic at Providence Hospital, a position he has held for many years.

The newly organized **Metropolitan Washington Industrial Nurses' Association** held its first program and dinner meeting at the Highlands Apartment dining room, April 7. A branch of the American Association of Industrial Nurses, the new group was organized in December, 1952 and has a membership of 48 nurses from industrial organizations in the District of Columbia and nearby Maryland and Virginia. The President of the new organization is Mrs. Mabel Zachary, who is associated with the Chesapeake and Potomac Telephone Company.

Dr. Emil J. C. Hildenbrand, Medical Director of the Potomac Electric Power Company, was one of the speakers at the April meeting.

Dr. James K. Shafer, who has served as Assistant Chief of the **Division of Venereal Disease, PHS,** has been appointed Chief of the Division by Surgeon General Leonard A. Scheele. **Dr. Clarence A. Smith,** of Chicago, Illinois, was named Assistant Chief.

Dr. Shafer received his degree in medicine from the University of Nebraska College of Medicine in 1938 and his Master of Public Health degree at Johns Hopkins University in 1943. Prior to coming to Washington he served as venereal disease control officer assigned to health departments in Chicago and Moline, Illinois, as well as Wayne County Health Department in Dearborn, Michigan. Dr. Shafer succeeds Dr. Theodore J. Bauer, who recently became Medical Officer in Charge of PHS's Communicable Disease Center in Atlanta, Ga.

Dr. Smith has been Venereal Disease Control Officer for the City of Chicago for the past two years.

Drs. Louis K. Alpert, William S. McCune and Charles S. Wise have been named honorary members of the **Smith-Reed-Russell Medical Society.** Induction into membership took place at the annual banquet of this honorary scholastic society of George Washington University School of Medicine in the Chinese Room of the Mayflower Hotel, March 19. The three honorees are members of the faculty of the Medical School: Dr. Alpert, Adjunct Clinical Professor of Medicine; Dr. McCune, Associate Clinical Professor of Surgery; and Dr. Wise, Professor of Physical Medicine and Rehabilitation.

Twenty-eight new members from the Medical School were accepted into the Society. Dr. Harvey Brinton Stone, Associate Professor of Surgery at the Johns Hopkins University, addressed the dinner guests on the subject, "Limitations of Newer Radicalism in the Surgical Attack on Malignant Disease."

Dr. Charles S. Coakley, Professor of Anesthesiology at George Washington University School of Medicine, will direct research into the relation of blood substances to allergies under a $4,000 grant awarded to the University by Ciba Pharmaceutical Products, Inc. of Summit, New Jersey.

Dr. Coakley will try to ascertain whether the amount of histamine increases in the blood of persons having such allergies as hives, hay fever and bronchial asthma. The histamine will be measured by use of a chromographic paper technic recently developed by Ciba in coöperation with Dr. Coakley. The histamine study has developed from results obtained by Dr. Coakley during earlier research on the use of antihistamines to prevent allergic reactions often connected with blood transfusions.

Dr. Vincent M. Iovine has been appointed Chief of the Emergency Casualty Services, a component service within the Medical Care Services of the Medical and Health Services of the Civil Defense Organization for the District of Columbia, succeeding Dr. William D. Claudy, who resigned upon being called into military service. Dr. Iovine will serve under the direct supervision of the Coördinator for the Medical Care Services for the purpose of recruiting, organizing, and training the Emergency Casualty Services and directing the operation of same during disaster.

Dr. Jonathan M. Williams attended the Harvey Cushing Society meeting at Hollywood Beach, Florida, April 23–25, and then proceeded to the Dominican Republic, where he delivered a series of lectures on neurosurgery to the medical students at the University of Santo Domingo, the oldest medical school in the Western Hemisphere. Dr. Williams also visited medical institutions in Jamaica and in several parts of Cuba.

Dr. Noel Stow was guest lecturer during the week of April 20 for the Annual Spring Postgraduate Conference in Ophthalmology at the University of Michigan in Ann Arbor. Dr. Stow lectured on "The Diagnosis and Treatment of Epibulbar and Orbital Tumors" with particular reference to the surgical aspect.

Dr. Stow is head of the Eye Cancer Clinic at Episcopal Eye, Ear and Throat Hospital and of the Eye Department of the George Washington University Cancer Clinic.

Drs. Benjamin Rones and Harry T. Linger presented a paper on "Accurate Diagnosis of Malignant Melanoma of the Choroid" before the 12th Annual Meeting of the Wilmer Residents' Association at the Johns Hopkins Hospital in Baltimore on March 26. This meeting was attended by over 300 ophthalmologists from all parts of the United States.

Dr. Allen Widome has been appointed Chief of Anesthesiology at Columbia Hospital for Women, filling the vacancy caused by the death of Dr. Jesse T. Mann. Dr. Widome is on the staff of George Washington University School of Medicine as Clinical Instructor in Anesthesiology and has served both George Washington and Columbia Hospitals as Associate in Anesthesiology. He is a diplomate of the American Board of Anesthesiology.

Dr. Horatio N. Dorman, Chief of Staff in Urology at Emergency Hospital, was elected President of the Mid-Atlantic Section of the American Urological Association at its three-day meeting in Roanoke, Virginia, March 12–14. Dr. Charles A. W. Uhle of Philadelphia was elected Vice President and Dr. Charles A. Hoffman, of Huntington, West Virginia, was reëlected Secretary-Treasurer. About 250 urologists from 6 states attended the meeting.

Dr. James Peter Murphy has opened an Electroencephalographic Laboratory at 1904 R Street, N.W.

Dr. John W. Trenis represented the District Medical Society at the Third National Conference on Placement of Severely Handicapped, which was held in Washington, March 23–25, in the American Legion auditorium.

Dr. Ernest A. Gould, Chairman of the District Medical Society's Committee on Medical Care, **and Theodore Wiprud,** Secretary of the Society, attended the 33rd Annual Conference of the National Health Council in New York, March 18 and 19. On the agenda for discussion was the Report of the President's Commission on the Health Needs of the Nation. Dr. Paul B. Magnuson, who headed the Commission, was at the meeting to present and discuss his report.

Dr. Murray M. Copeland, Professor of Oncology, Georgetown University School of Medicine, addressed a meeting of the medical staff of the M. D. Anderson Hospital for Cancer Research in Houston, Texas, March 25. He spoke on "Premalignant Lesions of the Breast." The following three days he attended the meetings of the Southern Surgeons Club, also in Houston. Dr. Copeland is currently President of the Club. Earlier in the month, March 6 and 7, he attended the Sixth Annual Cancer Symposium of The James Ewing Society at the Memorial Center for Cancer and Allied Diseases in New York.

Dr. Carl Berg has been appointed Chairman and **Dr. Milton C. Cobey,** Vice Chairman of the **Medical Advisory Committee to the District Chapter of the National Foundation for Infantile Paralysis** by Mr. Elwood H. Seal, Chairman of the Chapter. Reappointed to serve on the Medical Advisory Committee were Drs. Montgomery Blair, Jr., Edgar P. Copeland, Walter Freeman, Julius S. Neviaser, Daniel L. Seckinger, William J. Tobin and Charles

S. Wise. Dr. Berg will also serve on the Chapter's Executive Committee.

Dr. George M. Wheatley, Third Vice President of the Metropolitan Life Insurance Company, addressed a dinner meeting of the Medical Society's **Section on Pediatrics** at Hotel 2400, March 24. Dr. Wheatley, who is Chairman of the Committee on Accident Prevention of the American Academy of Pediatrics, stressed the continuing need for parental education in preventing childhood accidents. Dr. George Maksim, Chairman of the Section, presided.

At the meeting of the Board of Directors of the **Washington Home for Foundlings,** March 23, Walter S. Pratt, Jr., was reëlected President. Also reëlected to office were Dean Hill Stanley, First Vice President; Mrs. Boyd Taylor, Second Vice President; and Evelyn Hibbard, Secretary. The Washington Loan and Trust Company was appointed Treasurer.

Reëlected to the Board of Directors were, among others, Drs. William S. Anderson, Lewis C. Ecker, Clarence K. Fraser, J. R. Heller, Harry H. Kerr, and Calvin T. Klopp. Drs. Robert E. Moran, William J. Tobin and Wendell M. Willett were reappointed consultants.

Dr. William A. Howard was host to the **Osler Society,** March 23. Dr. Hugo V. Rizzoli read a paper on "Pneumoencephalus and Rhinorrhea." Dr. Thomas L. Hartman gave a case report on methyl chloride intoxication.

Dr. Robert B. Nelson was host to the Society, April 27, when the following program was presented: "Psychiatric Emergencies," Dr. Marshall deG. Ruffin; case report on genitourinary tuberculosis, Dr. Hilbert S. Sabin.

Dr. Winfred Overholser gave the Annual Charter Day Address at the New York College of Medicine, April 13. The subject he selected for the address was "A Psychiatrist Looks at Medicine."

Captain George N. Raines, MC, USN, Head of the Neuropsychiatry Branch, Professional Division, represented the Navy's Bureau of Medicine and Surgery at three meetings at and near Rochester, Minn., during the period, March 30–April 1, 1953. Captain Raines is also Professor and Director of the Department of Psychiatry of Georgetown University School of Medicine.

On March 30 Captain Raines was the guest speaker at a meeting of the Fellowship Group of the Mayo Foundation for Medical Education and Research. "Psychiatric Selection for Military Service" was the topic he discussed.

On March 31 he addressed the superintendents and clinical directors of the Minnesota State Hospitals at a meeting at the Rochester State Hospital, Rochester, Minn., and on April 1, the supervisory personnel of the Minnesota State Penal Systems, who were meeting at the State Prison in Stillwater. The subject of his address before the latter group was "Personality Disorders as a Cause of Antisocial Behavior."

Dr. Winfred Overholser, Superintendent of Saint Elizabeths Hospital, addressed the Washington Committee on Improving the Administration of Justice of the American Bar Association, March 19, on "Some Problems of the Criminal Insane at Saint Elizabeths Hospital." Following his address the Committee, which is made up of judges, lawyers and laymen, voted to support the pending budget request for funds to build a new 375-bed maximum security section for the Hospital.

Dr. Frank D. Costenbader gave two talks before the Ohio State Medical Association in Cincinnati, Ohio, April 21. They were entitled, "What to Do about Strabismus" and "Strabismus Surgery—Bilateral or Unilateral?"

Dr. John B. Nichols, retired Medical Director of Acacia Mutual Life Insurance Company, made front-page news in the City Section of the *Washington Post*, March 23, when the *Post* reproduced some "faded brown photographs" of little-known Fort Haggerty in Rosslyn, Va., "that was a rampart of a defensive ring around Washington during the Civil War." Dr. Nichols found the pictures among the effects of his father, George C. Nichols, who was a private in Compay H of the Second New York Heavy Artillery and stationed at the Fort for five months in 1864. The Fort was located at the western edge of the old Washington-Alexandria Canal, and was opposite what is now called Theodore Roosevelt Island.

Dr. Oscar B. Hunter, Jr. discussed "The Nursing Problems of the District of Columbia" at a luncheon meeting of the Public Health Committee of the Washington Board of Trade, March 26, at the Burlington Hotel. Dr. J. Ross Veal is Chairman and Dr. Hunter a member of this Committee.

Dr. John McC. Warren, of Laurel, Md., President of the Prince Georges County Medical Society, was the first speaker, April 8, on a weekly program sponsored by the Society over Station WNAV. The station is located in Annapolis and has studios in Laurel. Dr. Warren is an Associate member of the District Medical Society.

Dr. James Alexander Lyon, for many years a trustee of the Pan American Medical Association, returned recently from a cruise to South America, Panama City, Haiti, and Cuba, sponsored by the Association. Dr. Lyon participated in a panel discussion on the Management of Patients Suffering from Acute Coronary Infarction, which was held in connection with the scientific meeting.

Dr. Adrian Recinos, Jr. was called into active duty in the U. S. Navy on March 15, for a period of two years. He expects to be stationed on the West Coast. Mail will be routed to him through the Falls Church Medical Center, 6318 Willston Drive, Falls Church, Va.

Dr. George William Ware has returned from two years of active service in the Army Medical Corps and has opened his office for the practice of thoracic and cardiovascular surgery in the Farragut Medical Building.

Dr. Herbert F. Manuzak was released from the Navy in February and has decided to enter private practice in Glen Burnie, Maryland, where he is becoming a member of the Ann Arundel County Medical Society.

Dr. Ralph J. Carbo, Jr. has returned to Washington after serving in the Army Medical Corps and has reopened his office for the practice of ophthalmology in the Parkwood Medical Building.

Dr. Vincent H. Gillson resigned his Associate membership in the District Medical Society when he moved to Paterson, New Jersey, where he resides at 21 Lee Place. Dr. Gillson, a pathologist, has affiliated with the Bergen Pines County Hospital in Ridgewood, N. J. In Washington he was associated with the Armed Forces Institute of Pathology.

Two Active members have recently transferred to Associate membership. **Dr. Clayton E. Wood** is now in New Orleans, Louisiana, where he is associated with the Delgado Outpatient Clinic at 1565 Tulane Avenue. **Dr. Rowland F. Wilkinson** gave up his office in the District of Columbia and is devoting full time to his office in Riverdale, Maryland.

Mead Johnson and Company opened a Regional Sales Office, May 1, in Suite 419, Eig Building, 8641 Colesville Road, Silver Spring, Maryland. Mr. Earl F. C. Payne, who has represented Mead Johnson in the District of Columbia for a number of years, will be the first Regional Manager. This office will service the District of Columbia, Maryland, Virginia, West Virginia and North Carolina. The telephone number is Juniper 9-1222.

BOOK REVIEWS

A Doctor's Soliloquy. Joseph Hayyim Krimsky. Price, $2.75. Pp. 116. New York: Philosophical Library, 1953.

In a reflective style, Dr. Krimsky points out, with many examples, the close relation of science and religion. Based on years of experience in the study of both, his sound conclusions are sincere and comforting.

His own words give best the essence of the book:

"The unrest of the mind, the secret trouble within the heart, the want of psychic shelter, repose and refuge, the lack of religious comfort and support, these are the toxic 'germs' of modern life.

"For this we need the wisdom and knowledge of the physician working hand in hand with the man of spiritual insight, compassion, loving kindness and divine guidance.

"Science today confirms what religion has intuitively known from time immemorial, that faith, love and hope can work miracles of healing and restoration."

In another section we read: "Conception and birth are miracles beyond our understanding even though we can plot out the steps and stages in the process."

Filled with quotations from great works, this book is good for the reader's "thoughtful" moments. It can be read a chapter at a time, and should find a welcome place on the library table or in the physician's waiting room.

Mrs. Hugh H. Hussey

A Textbook of Pharmacology—Principles and Application of Pharmacology to the Practice of Medicine. William T. Salter, M.D., Professor of Pharmacology, Yale University School of Medicine. Price, $15.00. Pp. 1240, with 284 figures. Philadelphia: Saunders, 1952.

This is the first edition of a textbook of pharmacology by an outstanding clinician and pharmacologist. The author mentions in the preface that "This is a personal book, recording the experiences and reflecting the choices of one who has spent many hours at the bedside of clinical patients as well as long nights in the laboratory."

This large volume is divided into four parts: (I) General Principles of Pharmacology; (II) Drug Action on Physiological Mechanisms; (III) The Application of Drugs in Clinical Medicine; (IV) Toxicology.

It is difficult to segregate the pharmacology of a drug from its therapeutic application. This textbook makes an attempt to discuss the drug action on physiological mechanisms in one part and later, in another part, discusses the application of drugs in clinical medicine. Under Part III, The Application of Drugs in Clinical Medicine, the author has a section called "Drugs and Body Systems" in which he discusses only the following: the eye, neurological and muscular disorders, the alimentary canal, the uterus and the skin. The systems not included in Part III are included in Part II, Drug Action on Physiological Mechanisms. It would probably be more appropriate in a textbook of pharmacology to have a pharmacologic classification and application of the drugs to the practice of medicine under the respective pharmacologic categories.

This book is characterized by its clear discussion of the recent developments in pharmacology as well as the presentation of full details of pharmacologic action and therapeutic application. A large mass of carefully collected data is clearly presented in the charts, diagrams, figures and illustrations. The references at the end of each chapter have been wisely selected. The author has chosen material which he feels the medical student and the up-to-date practitioner should understand. He has presented it in a fashion that is scientific without being tedious.

The book can be recommended to all those who are interested in drug action and therapeutics. In addition, it will prove illuminating and stimulating to the many physicians who have accumulated over the years a vast amount of knowledge from practice but who have avoided or neglected the more scientific approach to the subject. The book will be of considerable value not only as a critical review of present-day knowledge concerning pharmacology and therapeutics but also as a reference source. The book is a welcome addition to the reliable textbooks on pharmacology available to medical students and physicians.

A. Earl Vivino, M.D.

Second Annual Report on Stress. Hans Selye, M.D., Ph.D. (Prague), D.Sc. (McGill), F.R.S. (Canada), Professor and Director of the Institut de Médecine et de Chirurgie expérimentales, Université de Montréal, and Alexander Horava, M.D. (Lausanne), Research Associate and Librarian of the Institut de Médecine et de Chirurgie expérimentales, Université de Montréal. Price, $10.00. Pp. 526. Illustrated. Montreal, Canada: Acta, Inc., 1952.

As in the previous volume of this planned annual series of reports, Drs. Selye and Horava have brought the general adaptation syndrome up to date. The world literature pertaining to the subject is systematized and tabulated each year, this material amounting to over 4,000 publications for this past year. These volumes are written as a combination of an extensive classified index of pertinent new facts with an evaluation by Dr. Selye of the principal findings. The descriptions and discussions, however, have been kept to an absolute minimum this year, in contrast to last year's volume, thereby avoiding much needless repetition.

The format of the book is unchanged, so that it continues as a companion volume of Stress and the First Annual Report. The only change is that all the illustrations have been grouped into an atlas in one section of the book, so that the text matter appears on nonglossy paper, which facilitates reading and allows marginal annotation.

Patrick B. Storey, M.D.

Rheumatic Diseases—Diagnosis and Treatment. Eugene F. Traut, M.D., F.A.C.P., Associate (Rush) Clinical Professor of Medicine, University of Illinois; Attending Physician to the Cook County Hospital and to the West Suburban Hospital, Oak Park, Illinois; Associate Attending Physician to the Presbyterian Hospital of Chicago; Director of the Arthritis Clinic of Cook County Hospital; Lecturer on Arthritis in the Cook County Graduate School of Medicine; member of the American Rheumatism Association. Price, $20.00. Pp. 942, with 192 illustrations. St. Louis: Mosby, 1952.

Dr. Traut presents in his book a complete detailed discussion of all the diseases which involve, as part of their natural history, the musculoskeletal system. His approach is both from the medical point of view and from the orthopedic. For example, the discussion of the collagen diseases, metabolic diseases of bone, rheumatic fever, and rheumatoid arthritis include all the ramifications one would expect to find in a textbook of medicine, but with the thoroughness of a monograph. At the same time every detail in management is considered, including the elements of treatment peculiar to medicine, orthopedics and physical medicine.

Most of the book is written by Dr. Traut himself. However, some of the sections are written by others, notably the general considerations of the collagen diseases, the ocular and dermatologic aspects of rheumatic diseases, and the surgical treatment of rheumatic diseases.

The book is well written and very well composed, so that it is easy to use as a source of reference. It is highly recommended as a useful volume to all physicians.

PATRICK B. STOREY, M.D.

BOOKS RECEIVED

Acknowledgment is made of the following books which have recently been received. Selections will be made for more extensive review in the interests of our readers and as space permits. Physicians are urged to submit reviews of additional current books, which, in their opinion, merit comment.

Pheochromocytoma and the General Practitioner. JOSEPH L. DECOURCY, M.D., AND CORNELIUS B. DECOURCY, M.D., authors of "Pathology and Surgery of the Thyroid." Pp. 165. Cincinnati, Ohio: DeCourcy Clinic, 1952.

Letters to a Doctor's Secretary. ANNA DAVIS HUNT. Price, $2.00. Pp. 75. Rutherford, N. J.: Medical Economics, Inc., 1952.

Encyclopedia of Aberrations: A Psychiatric Handbook. Edited by EDWARD PODOLSKY, M.D., State University of New York Medical College; with a foreword by Alexander Adler, M.D., New York University College of Medicine. Price, $10.00. Pp. 550. New York: Philosophical Library, 1953.

Modern Treatment; A Guide for General Practice. By fifty-three authors. Edited by AUSTIN SMITH, M.D., Editor of *The Journal of the American Medical Association*, AND PAUL L. WERMER, M.D., Secretary, Committee on Research, American Medical Association. Price, $20.00. Pp. 1146. New York: Hoeber, 1953.

The Conception of Disease: Its History, Its Versions and Its Nature. WALTHER RIESE, M.D. Price, $3.75. Pp. 120. New York: Philosophical Library, 1953.

Ciba Foundation Colloquia on Endocrinology. Vol. I. Steroid Hormones and Tumour Growth and Steroid Hormones and Enzymes. Pp. 315, with 48 illustrations. Vol. II. Steroid Metabolism and Estimation. Pp. 429, with 96 illustrations. Vol. III. Hormones, Psychology and Behaviour and Steroid Hormone Administration. Pp. 380, with 78 illustrations. Vol. IV. Anterior Pituitary Secretion and Hormonal Influences in Water Metabolism. Pp. 591, with 139 illustrations. G. E. W. WOLSTENHOLME, O.B.E., M.A., M.B., B.CH., General Editor for the Ciba Foundation; Assisted by MARGARET P. CAMERON, M.A., A.B.L.S. Philadelphia: Blakiston, 1952.

JOSEPH HILL WHITE, M.D.

(1859–1953)

Dr. Joseph Hill White, retired Assistant Surgeon General of the United States Public Health Service, died, February 28, 1953, at his home, 2955 Newark Street, N.W. He was 93 years old. Dr. White became famous for his conquest of yellow fever, cholera and smallpox epidemics throughout the Western Hemisphere.

As a boy of six, Dr. White witnessed General Sherman's "march to the sea" through his home town, Milledgeville, Georgia, where he was born May 4, 1859. He graduated from the Baltimore College of Physicians and Surgeons (now the Medical Department of the University of Maryland) in 1883, at the age of 21, and at the time of his death was the oldest living alumnus. He entered the Marine Hospital Service, later to become the Public Health Service, in 1884. He served as a health officer in Europe, Central and South America and throughout the United States. He was Assistant Surgeon General for two terms, 1899 to 1903 and from 1920 to 1925, when he retired.

Dr. White is credited with the first successful control of a yellow fever outbreak in the United States. He was a close friend of Dr. Walter Reed and was familiar with the latter's hypothesis that the disease was carried by mosquitoes. Applied to a limited outbreak in Soldiers' Home, Hampton, Va., in 1899, the method worked, although the theory was not proven by Dr. Reed until the following year.

In 1905 Dr. White was successful in stamping out a yellow fever epidemic in New Orleans by the same method. He later served as vice director for yellow fever control of the Rockefeller Foundation's International Health Board.

He was detailed to the Army, with the rank of Colonel, during World War I to serve as general inspector of anti-malarial work. He became first chairman of the National Leprosy Commission.

In 1942 the President of Guatemala made him a grand officer of the Order of the Quetzal, the Republic's highest honor, for distinguished service in yellow fever eradication in that country.

Dr. White was a member of the American Medical Association and chairman of its Section on Hygiene and Sanitary Science in 1909; in 1911 he was President of the American Society of Tropical Medicine. He was the author of many papers on sanitary science and a contributor to Nelson's System of Medicine from 1927 to 1929.

For 25 years he was a member of the Presbyterian Church of the Pilgrims in Washington. He was a teacher in the Sunday School where the Men's Bible Class is named for him.

Surviving are three daughters, Mrs. Robert A. Herring, of High Point, N. C., and Miss Mary Roberta White and Miss Josephine Hill White of the home address.

WALTER LEE KLINE, B.A., M.D.

(1872–1953)

Dr. Walter Lee Kline, until recently an Associate member of the Medical Society of the District of Columbia, died suddenly, April 5, 1953, at Mt. Alto Hospital. He lived at 115 Prospect Street, Chevy Chase, Md.

Dr. Kline was born in Dayton, Ohio, February 24, 1872. He graduated from Otterbein University in 1894 and received his degree in medicine from the College of Physicians and Surgeons of Columbia University in 1898.

Dr. Kline led an unusually colorful medical career. During the Spanish-American War he served on a special train returning sick and wounded men from southern camps. He was coroner of Montgomery County, Ohio, before going to Mexico to practice in 1908. Four times Dr. Kline and his family escaped from Mexico during the bandit era and three times he returned to continue his practice at Guadalajara. Once he was before a firing squad and was dramatically rescued from execution by a German consul. He treated the bandit Pancho Villa.

Theodore Roosevelt named Dr. Kline surgeon of his proposed reorganized regiment of Rough Riders in 1916, but when the proposal fell through, Dr. Kline joined the Army Medical Corps. He was Commanding Officer of Base Hospital No. 4 at Eagle Pass, Texas, and was stationed also at Fort Bliss, Texas, and Fort Thomas, Kentucky. He was discharged in 1921 with the rank of Major.

Dr. Kline came to Washington in 1921 and joined the staff of the Veterans Administration. He was Chief Medical Officer of the Regional Office until he retired in 1944.

Dr. Kline was an Associate member of the Medical Society of the District of Columbia from 1928 to 1952. He was a 32nd degree Mason in El Paso Consistory, a charter member and post surgeon of Lincoln Post of the American Legion, and a member of the Forty and Eight. He was a member of the Central Presbyterian Church for more than 30 years.

Surviving are his wife, Mrs. Emily B. Kline, and two sons, Dr. Walter L. Kline, Jr., a physician in Messick, Virginia, and Dr. Philip S. Kline, of San Antonio, Texas.

Carbon Tetrachloride Poisoning—Hardin

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than resort to the use of more radical measures like the artificial kidney.[9–12]

Subconjunctival hemorrhage, present in this case, has been noted often in carbon tetrachloride poisoning. It may be due to liver injury with an upset in prothrombin[12] and fibrinogen.[13]

That the ingestion of alcohol aggravates the toxicity of carbon tetrachloride has been known for a long time.[3] Whether it had anything to do with the present case or not I do not know.

Summary

A typical case of carbon tetrachloride poisoning has been reported. It was due to the inhalation of the vapor from 3 ounces of carbon tetrachloride used in removing adhesive tape from the patient's chest.

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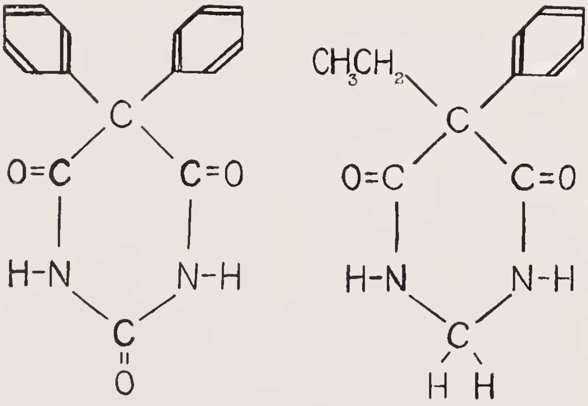
THE ROLE OF SOME EXPERIMENTAL ANTICONVULSANTS, MYSOLINE, MILONTIN AND 1461L*

BUSHNELL SMITH, M.D.
Clinical Adjunct Instructor in Neurology, Georgetown University School of Medicine
FRANCIS M. FORSTER, M.D.
Professor and Director of the Department of Neurology, Georgetown University School of Medicine

DURING the past two years a number of chemical compounds have been found to have anticonvulsant properties for experimental epilepsy in animals. In turn these compounds have been submitted for clinical trial in the treatment of epilepsy in humans. We wish to report on 3 of these compounds.

One, 5-phenyl-5-ethyl-hexahydropyrimidine-4:6-dione (Mysoline), is a white crystalline substance affording a high protection against electrically induced convulsions in animals (figure 1). It has an extremely low toxicity for animals. Handley and Stewart,[1] reporting a series of 40 patients with generalized convulsions, noted that attacks were reduced in 80 per cent and were completely controlled in 30 per cent. No conclusions were reached in regard to petit mal or psychomotor epilepsy.

N-methyl-a-phenyl-succinimide (Milontin) is a white crystalline powder relatively nontoxic to animals (figure 2). It gives a high protection against metrazol-induced convulsions. Zimmerman[2] reported in a series of 50 patients with petit



PHENOBARBITAL MYSOLINE

FIG. 1. The structure of phenobarbital is shown on the left. 5-phenyl-5-ethyl-hexahydropyrimidine-4:6-dione is the compound on the right. Note the difference in the lower carbon atom and the side chain.

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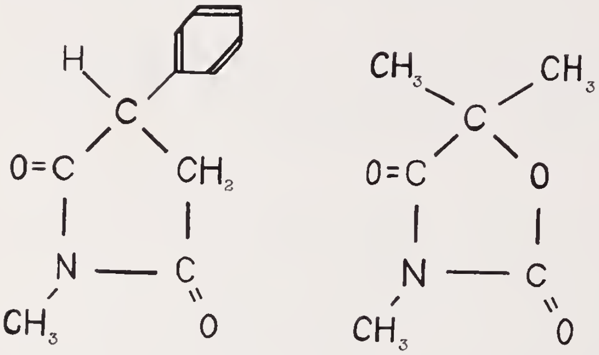
mal epilepsy or its variants that 30 per cent were free of seizures, and that an additional 30 per cent showed a marked reduction in attacks. No conclusions were recorded in regard to major convulsions or psychomotor seizures. Millichap[3] reported similar results with 17 patients. One patient with psychomotor and grand mal improved while on Milontin.



MILONTIN TRIDIONE

Fig. 2. The formula for tridione appears on the right, whereas the structure of N-methyl-a-phenyl-succinimide is on the left. The essential difference is the substitution of a methyl group for the oxygen and a phenyl group on the first carbon.

Compound 1461L (Lederle) is a white crystalline piperazide with anticonvulsant activity. No report on its actions has appeared in the literature.

In our series, 64 persons were placed on one or more of these compounds. Sixty-one were patients seen at Georgetown University Hospital in the epilepsy clinic or on private neurologic services. Three were followed at the epilepsy clinic of the District of Columbia Society for Crippled Children. The ages of the patients ranged from 2 months to 55 years, with an equal distribution of children and adults. The majority of the patients had symptomatic epilepsy, there being only 4 with petit mal absence. Twenty-three patients had generalized or focal convulsions, 7 had psychomotor seizures alone, and 5 had 1 or more forms of the petit mal triad (petit absence, myoclonic jerks, akinetic seizures). In addition, 11 had convulsions and psychomotor epilepsy, and 17 had convulsions and 1 or more forms of the petit mal triad. One had convulsions and psychomotor attacks in addition to petit mal absence. Since all of the patients had been treated (some for years) with the usual anticonvulsant medications with little or no relief, they were maintained, whenever possible, on the combination of previous medications which afforded them the best protection. Patients with adequate seizure control on standard preparations were not transferred to the new drugs. These patients therefore constitute for the most part the very difficult, uncontrolled cases of epilepsy. The new medicines were added to the "regular" medicine. As improvement or control was noted the "regular" medicine was decreased or dropped altogether.

Of the patients taking Mysoline, 9 required no other antiepileptic medication. The average dose was 750 mg. a day. The 44 patients receiving Mysoline in addition to other medicines took an average dose of 500 mg. a day. For Milontin the average dose was 1.5 grams a day for both groups of patients. The average dose of 1461L was 600 mg. a day. For all 3 medicines each patient was started on a low dosage (usually 1 capsule or tablet) to minimize toxic effects, and the dosage was built up gradually.

All of the patients had been on medication for at least a month unless toxic manifestations required stopping sooner. The median for the 53 patients taking Mysoline was 2.5 months, with 16 patients taking it for over 6 months and 4 patients for over 12 months. For Milontin the median is again 2.5 months, with 6 out of 17 taking it for more than 6 months, and with 4 having been on it more than 12 months. The 8 patients taking 1461L have a median of 4 months, with 2 taking it longer than a year.

The results with Mysoline are shown in table 1. Ten patients, including 2 with psychomotor attacks, became seizure-free, and 21 had marked improvement with Mysoline. Twelve patients had only slight improvement, and 4 showed no change at all. Six showed toxic signs and symptoms which necessitated discontinuing the drug. No patient's seizures became worse on Mysoline. When these results were examined by seizure types, convulsions responded well, with 6 (26 per cent) completely controlled and 8 (35 per cent) markedly improved. Of the 7 patients with psychomotor epilepsy, 2 (28 per cent) were completely controlled, and 3 (43 per cent) showed marked decrease in seizures. When the group with both psychomotor attacks and convulsions were examined, no patient's seizures were completely controlled and 3 patients (27 per cent) were markedly improved. In this group the convulsions were usually almost completely eliminated, whereas the psychomotor attacks persisted but decreased in number and often in intensity. The petit mal triad also responded to Mysoline, with 2 patients completely controlled and 7 markedly improved. The toxic signs appeared indiscriminately so far as seizure type was concerned.

Five patients, after taking 1 tablet, became dizzy and nauseated and exhibited general malaise. Three of these patients were ataxic and 1 vomited for 4 hours. One patient continued to take the medicine for a week, during which time she had ataxia and light-headedness although the nausea disappeared. Six patients developed severe to excessive drowsiness. Five improved with the addition of benzedrine or reduction of dosage, and 1 had to stop the Mysoline. Most of the patients complained of transient drowsiness when first started on Mysoline, but after the lapse of a week they had no further complaint. Drowsiness alone is not a serious complication and does not necessitate withdrawal of medication, since the duration of the torpor is only 3 to 7 days and the degree of drowsiness is not dependent on the dosage. Drowsiness may occur for 3 to 7 days on a 250 mg. dose per day, disappear, and not reappear even with marked increase in dosage. No rashes, blood dyscrasias, urinary complaints, or gum hypertrophy were found.

TABLE 1

Results of Mysoline Therapy

Fifty-three Patients

	GRAND MAL		PSYCHOMOTOR		PETIT MAL TRIAD		GRAND MAL + PSYCHOMOTOR		GRAND MAL + PETIT MAL TRIAD		TOTAL
OTHER MEDICINE	Without	With	Without	With	Without	With	Without	With	Without	With	
No seizures	1	5	0	2	0	0	0	0	0	2	10
Marked decrease	1	7	3	0	0	1	0	3	2	4	21
Slight increase	0	5	0	1	0	0	0	5	0	1	12
No change	0	3	0	0	0	0	0	0	0	1	4
Worse	0	0	0	0	0	0	0	0	0	0	0
Toxic	1	0	0	1	0	1	1	2	0	0	6
Total	3	20	3	4	0	2	1	10	2	8	53

Table 2 depicts the results with Milontin. One patient showed complete control of seizures, and

TABLE 2

Results of Milontin Therapy

Seventeen Patients

	PETIT MAL TRIAD		GRAND MAL + PSYCHOMOTOR		GRAND MAL + PETIT MAL TRIAD		TOTAL
OTHER MEDICINE	Without	With	Without	With	Without	With	
No seizures	0	0	0	0	1	0	1
Marked decrease	0	1	0	3	0	4	8
Slight decrease	1	0	0	0	0	1	2
No change	0	1	0	1	1	2	5
Worse	0	0	0	0	0	0	0
Toxic	0	0	0	0	0	1	1
Total	1	2	0	4	2	8	17

8 had marked improvement, which included 3 with psychomotor attacks and convulsions combined. Two had slight improvement, and 5 showed no change. None was made worse by Milontin. The lone toxic reaction was a generalized rash which developed 10 days after the drug was started and cleared after it was stopped. Another patient, who had previously suffered a leukopenia during tridione therapy, had a slight rash when first started on Milontin. Milontin was discontinued until the rash cleared up and was restarted in a desensitizing dose of 0.006 Gm. per day and augmented by a dose of 0.06 Gm. every third day until a final effective daily dose of 1.5 Gm. was reached without the reappearance of a rash. No blood dyscrasias or urinary complaints such as were reported by Millichap[3] in 13 out of 17 patients were found.

Compound 1461L showed the results seen in table 3. One patient with petit mal epilepsy had complete control on 1461L alone, and 1 patient with convulsions and petit mal had marked improvement. Two patients showed slight improvement and 2 showed no change, whereas the seizures became worse in 2 patients. One of these patients had increased convulsions while petit mal markedly decreased. No toxic signs were found in any patient.

TABLE 3
Results of 1461L Therapy
Eight Patients

	GRAND MAL		PETIT MAL TRIAD		GRAND MAL + PSYCHOMOTOR		TOTAL
OTHER MEDICINE	Without	With	Without	With	Without	With	
No seizures	0	0	1	0	0	0	1
Marked decrease	0	0	0	0	0	1	1
Slight decrease	0	1	0	1	0	0	2
No change	0	0	0	0	0	2	2
Worse	0	0	0	0	0	2	2
Toxic	0	0	0	0	0	0	0
Total	0	1	1	1	0	5	8

Significant conclusions can be reached from this study of 3 new anticonvulsant compounds. Mysoline is an effective drug for all types of seizures but is most effective in regard to convulsions. Since Mysoline is apparently not seriously toxic, it is preferable to phenacemide in the treatment of psychomotor epilepsy. It is now our custom to use Mysoline when dilantin and phenobarbital have failed in a patient with psychomotor epilepsy and to proceed to phenacemide if Mysoline also fails. Mysoline appears to work well in conjunction with other medicines. Toxic signs of dizziness, nausea, vomiting and ataxia appear early (usually after 1 tablet) and disappear rapidly when the medication is discontinued. Toxic signs are easily recognized. Side effects of drowsiness usually disappear in a week and may be counteracted with benzedrine, although occasionally the medicine must be discontinued. The average effective dose appears to be 500 to 750 mg. when the drug is used with other medicines and 750 mg. to 1 gram when it is used alone.

Milontin with the dose of 1.5 Gm. a day markedly reduces seizures in the petit mal triad and in psychomotor groups to a significant extent. It appears to have little effect on convulsions unless they are a direct result of the psychomotor or petit mal attacks. Higher dosages and a greater number of patients must be utilized before a definitive answer can be given. The toxicity of Milontin appears to be low.

The number of patients on 1461L hinders concrete conclusions. One patient with petit mal was completely controlled, whereas convulsions were made worse in another as the petit mal was improved. In 50 per cent of the patients seizures were unchanged or became worse. No toxic signs were found. These investigations are continuing and more preparations are being tried. It is expected that more definitive conclusions can be drawn at a later date.

SUMMARY

1. Sixty-four patients with epilepsy, all previously treated with standard anticonvulsant

(*Continued on page 337*)

SOME NOTES ON ANTIBIOTICS AND CHEMOTHERAPY IN INFECTIOUS DISEASES

WILLIAM J. MARTIN, M.D.
Division of Medicine, Mayo Clinic, Rochester, Minnesota

1. Four antibiotic agents in current use are capable of producing renal damage: (a) streptomycin, (b) polymyxin, (c) bacitracin, and (d) neomycin. Keep a close watch on the blood urea when using them; hesitate to give them in full dosage when the blood urea is elevated before their use.

2. It is probably not wise to give more than 10,000 units of bacitracin 4 times daily systemically because of its nephrotoxicity.

3. Neomycin is rarely used because it is both ototoxic and nephrotoxic. The drug should be used no longer than is absolutely essential, and then in a dose not exceeding 250 mg. every 6 hours by intramuscular injection.

4. One apparently cannot build up a sufficient concentration of neomycin in the urine to control susceptible organisms (example: *Pseudomonas aeruginosa*) without inducing severe ototoxic and nephrotoxic effects.

5. All of the so-called major antibiotics have been responsible for complicating oropharyngeal infections. Staphylococcal glossitis and pharyngitis have resulted from streptomycin therapy. Monilial infections of the mouth and throat occur with aureomycin and terramycin. Black tongue, which is probably due to a fungus, has occurred with the oral use of penicillin (the pigment may be due to the deposition of ingested iron in the fungus).

6. *Micrococcus pyogenes* is a common contaminant of blood cultures. Less than 50 organisms per c.c. of blood are more likely to indicate bacteremia than are larger numbers.

7. Resistant strains of *Micrococcus pyogenes* constitute one of the great problems in antibiotic therapy today. Sixty per cent of the strains are resistant to penicillin, 40 per cent to streptomycin and 35 per cent to aureomycin and terramycin.

8. So-called micrococcal or staphylococcal ileocolitis occurs in patients who have received terramycin or aureomycin by mouth for a long time and usually who have undergone recent surgery. Micrococci can be obtained from the stools in pure culture. The terramycin or aureomycin eliminates the normal gram-negative bacterial flora and allows the resistant micrococci to overgrow. Such micrococci are also usually resistant to penicillin and streptomycin; they may have their origin in hospital personnel carriers. The staphylococcal toxins induce intense restlessness, anorexia, vomiting, fever, abdominal distention, diarrhea and shock. The multiple, liquid, odorless, light-colored stools gradually return to normal if the micrococci can be eliminated and the negative flora returns. Erythromycin or magnamycin is effective in the treatment of this complication.

9. Erythromycin is one of the last defenses against micrococci resistant to more commonly used antibiotics. It currently has lifesaving value. However, micrococci can become resistant to it. It is given in doses of 300 to 500 mg. by mouth every 6 hours.

10. In many cases of persistent furunculosis and sycosis barbae, one can locate a reservoir of micrococci in the nose, eye or some other region, from which the continued reinfection occurs by means of the fingers or handkerchief.

11. Gram-negative bacilli, if resistant to aureomycin and terramycin, are also resistant to chlor-

amphenicol. Fortunately, however, a strain of *Micrococcus pyogenes* resistant to aureomycin and terramycin may be sensitive to chloramphenicol.

12. Organisms which have been made resistant to aureomycin, terramycin or chloramphenicol may become more sensitive to streptomycin. The converse also may prove true.

13. Even very sensitive strains of organisms can become resistant to streptomycin rapidly. Bacterial resistance is always at least a potential problem whenever streptomycin has been used in moderate or high dosage for more than a few days.

14. Streptomycin penetrates into the peritoneal cavity well but not into the pleural cavity. Therefore, streptomycin does not constitute an adequate systemic approach to empyema.

15. Streptomycin does not traverse the normal blood-brain barrier. Streptomycin given intrathecally is detectable for 24 hours in the spinal fluid.

16. One rarely encounters eighth nerve damage due to streptomycin if the dosage is no more than 2 Gm. daily for 2 weeks or 1 Gm. daily for 4 weeks, provided that renal function is normal.

17. Streptomycin is very effective against *Klebsiella pneumoniae* (Friedländer's bacillus).

18. Streptomycin is the drug of choice in most Pasteurella infections (plague, tularemia), but *Pasteurella multocida* is very sensitive to penicillin. The latter organism may be isolated in pulmonary infections of patients who handle chickens ("chicken farmer bronchitis").

19. Paresthesia, especially around the mouth and about the hands, may be seen during treatment with both streptomycin and polymyxin B.

20. The development in vivo of penicillin-resistant group A hemolytic streptococci has not as yet been reported.

21. Aureomycin and terramycin demonstrate cross resistance; that is, if an organism is resistant to aureomycin, it will usually be resistant to terramycin. Erythromycin and magnamycin (carbomycin) frequently exhibit cross resistance. Neomycin and streptomycin may exhibit cross resistance.

22. There are 2 known patterns of bacterial resistance: (a) consecutive mutations, a series of multiple genetic steps (example: penicillin), and (b) the spontaneous origin of a completely resistant form in a single step: single genetic change (example: streptomycin).

23. Postponing therapy until the results of 48-hour antibiotic sensitivity tests are reported does not accomplish much. The 24-hour report suffices. There is seldom more than slight growth of the culture, or an increase of more than 1 dilution in an additional 24 hours.

24. Three antibiotics are amenable to intrathecal use: (a) penicillin (10,000 units), (b) streptomycin (100 mg.) and (c) chloramphenicol (100 mg.). Never use aureomycin or terramycin intrathecally.

25. Combined therapy merely refers to the simultaneous use of more than one antibiotic. Such drugs may be either synergistic or antagonistic. For example, streptomycin usually will synergize with penicillin, aureomycin or terramycin. Penicillin, on the other hand, will usually be antagonized by aureomycin or terramycin.

26. Penicillin is bactericidal when organisms are rapidly multiplying, whereas aureomycin and terramycin are bacteriostatic. Perhaps this difference accounts for their therapeutic antagonism.

27. If an organism is resistant to an antibiotic in high concentrations (100 times the concentration employed), it probably will not respond to any contemplated synergistic combination with that antibiotic.

28. Polymyxin (50 mg. 4 times daily) and neomycin (250 mg. 4 times daily) will usually synergize and may occasionally be of benefit in serious infections due to gram-negative organisms resistant to other antibiotics. Bacitracin may be used synergistically with neomycin under similar circumstances for gram-positive infections.

29. Five clinical entities not uncommonly encountered require combined antibiotic therapy: (a) brucellosis, (b) enterococcal endocarditis, (c) bacteremia, (d) peritonitis, and (e) meningitis of undetermined cause. For the last 3 aureomycin or terramycin is combined with streptomycin,

except that for meningitis aureomycin is preferred to terramycin.

30. Combined terramycin (or aureomycin) and streptomycin therapy is still fairly effective against infections due to *Escherichia coli* and *Aerobacter aerogenes*. Streptomycin is no longer very effective against *Proteus vulgaris* and *Pseudomonas aeruginosa*. Terramycin (or aureomycin) is no longer very effective against the *Pseudomonas aeruginosa* but may be effective against *Proteus vulgaris*. Judicious use of polymyxin often will quickly erase *Pseudomonas aeruginosa*.

31. It is extremely difficult technically to determine the exact blood levels of antibiotics in patients receiving combined antibiotic therapy.

32. Bacterial endocarditis due to *Streptococcus faecalis* requires larger doses of antibiotics for longer duration than that due to most other organisms. Five to ten million units of penicillin combined with 1 to 2 Gm. of dihydrostreptomycin given for 4 to 8 weeks will give excellent results in the majority of cases of enterococcal endocarditis.

33. The treatment of choice in acute brucellosis is 750 mg. of aureomycin or terramycin given orally every 6 hours and 1 Gm. of dihydrostreptomycin given twice daily for 2 weeks. The treatment of chronic localized brucellosis is continued for 4 weeks and consists of only 1 Gm. of dihydrostreptomycin daily in addition to aureomycin or terramycin.

34. There is no contraindication to combining sulfonamide and penicillin therapy. Such combined therapy is rarely necessary, however.

35. Paradoxical antibiosis (zonal susceptibility, paradoxical zone phenomenon, hormesis) refers to the fact that high concentrations of an antibiotic may be less actively bactericidal or bacteriostatic than lower concentrations.

36. If an antibiotic is incorporated in culture media in concentrations lower than the bactericidal or bacteriostatic concentration, it apparently may exert a stimulating effect on the growth of some bacteria. Therefore, in treatment it is important to achieve sufficiently high concentrations of an antibiotic, but still "paradoxical antibiosis" must be kept in mind, and unnecessarily large doses must not be employed.

37. In most situations in which the use of aureomycin or terramycin (oxyteracycline) is indicated, the drugs may be used interchangeably. However, since aureomycin traverses the blood-brain barrier well and terramycin does not, the former drug is the one of choice for susceptible infections of the central nervous system.

38. Aureomycin is much more difficult to handle in the laboratory than is terramycin. Since the sensitivity or resistance of an organism is virtually identical to both drugs, terramycin is used in testing. Aureomycin is not stable in the presence of serum, oxygen, or changes in temperature.

39. Aureomycin and terramycin are not absorbed in substantial amounts from the rectum.

40. If the patient is unable to take substances orally, aureomycin or terramycin may be given intravenously. Five hundred milligrams of the drug is added to 200 c.c. of saline solution and the mixture injected into a vein in the arm in 20 to 30 minutes. Never give these drugs into the veins of the leg because of the likelihood of chemical phlebitis and the possibility of embolic phenomena.

41. Milk or soluble alkali given with aureomycin or terramycin decreases the gastrointestinal irritability associated with oral use of these drugs. Aluminum hydroxide impairs the absorption of these drugs.

42. One may use sodium bicarbonate in an attempt to ameliorate the nausea and vomiting associated with the oral use of aureomycin and terramycin when (a) the patient does not tolerate milk, or (b) the patient is using a low residue diet.

43. Terramycin and aureomycin remain in the blood in detectable amounts for 24 hours after oral administration, but the level begins to fall after 6 hours. Thus the drugs should be given every 6 hours.

44. There is no significant increase in the blood levels of aureomycin or terramycin after doses

of the drugs in excess of 1 Gm. every 6 hours due to inability of the intestine to absorb further quantities.

45. One may administer aureomycin or terramycin through a nasal suction tube. The drug is removed from the capsule, suspended in milk, and introduced through the tube. If the nasal tube is then clamped for 2 hours, absorption will occur.

46. Aureomycin has no blood-organ barrier.

47. Probably all patients taking aureomycin and terramycin note some change in bowel habit. One to 4 bulky, loose stools of lessened odor are usual each day. Patients with chronic constipation occasionally are disinclined to discontinue the use of the drug for this reason.

48. The mechanisms responsible for the ill effects of aureomycin or terramycin on the oral, vaginal and rectal mucosae are likely to be 3: (a) chemical, (b) fungal and (c) vitamin B deficiency.

49. Remember that pruritus vulvae in the diabetic patient receiving aureomycin or terramycin may be due to the antibiotic.

50. Terramycin appears to be more effective than aureomycin, weight for weight, against Rickettsia.

51. Aureomycin is effective in syphilis. This may be very important for the patient allergic to penicillin.

52. For patients with pneumonia of unknown type use aureomycin or terramycin. Be certain to exclude an underlying malignant lesion.

53. In most cases of peritonitis the drugs of choice are aureomycin or terramycin in addition to streptomycin.

54. Aureomycin and terramycin are very efficient anti-amebic drugs in intestinal amebiasis. Their mechanism of action may be dual: (a) suppression of intestinal flora, which induces a nutritional deficiency in the amebae, and (b) direct amebacidal action.

55. Aureomycin or terramycin is the drug of choice in the 3 least frequently encountered venereal diseases, that is, lymphopathia venereum, granuloma inguinale and chancroid.

56. In urinary infection resistant strains of *Proteus vulgaris* and *Pseudomonas aeruginosa* may displace other organisms in patients receiving aureomycin or terramycin.

57. Terramycin appears to be effective in eradicating pinworms. The whole family should be treated. Treatment should be continued at least a week.

58. Bacteremia and bacterial endocarditis due to *Bacteroides funduliformis* can be satisfactorily treated with combined terramycin (or aureomycin) and streptomycin therapy.

59. The concentration of penicillin in blood is increased approximately 1 unit per c.c. of blood for every 1,000,000 units of penicillin given each 24 hours.

60. When large amounts of penicillin are used. enough pyrogens may be administered to produce drug fever.

61. Beware of a pneumonia due to gram-negative organisms developing in a patient under penicillin therapy.

62. The average values of the height and duration of the penicillemia are less after the intramuscular administration of neopenil than after procaine penicillin. Thus procaine penicillin is more desirable in bacteremia. However, for infections of the lung, central nervous system and salivary glands due to penicillin-sensitive organisms, neopenil is preferred because of its higher concentration in those organs.

63. Neopenil produces levels of penicillin in the spinal fluid about 10 times greater than those produced by equal doses of other types of penicillin.

64. Pulmonary tissue apparently has a special affinity for penicillin (neopenil) which it removes from the blood stream rapidly. Once the drug is in the lungs, hydrolysis proceeds to liberate penicillin from the ester (lung repository effect). Neopenil seems specially indicated for pulmonary diseases caused by penicillin-sensitive organisms.

65. The bactericidal action of penicillin apparently persists for significant periods after it is no

longer demonstrable in the blood. Perhaps the drug persists in tissues much longer than it does in the blood, or perhaps the penicillin-damaged bacteria are disposed of by defense mechanisms of the host after the drug has been eliminated.

66. The blood transport of penicillin is a function of its solubility in the plasma rather than a function of its actual combination with blood proteins.

67. The inhibitory effects of penicillin on antibody production are probably on the basis of early destruction of the pathogenic organisms, rather than the result of the depression of antibody-producing mechanisms.

68. Penicillin O is similar to penicillin G in pharmacologic and antibacterial activity and can be substituted safely for the latter unit for unit. It is a satisfactory substitute for many individuals who have allergic reactions to penicillin G.

69. It is said that simultaneous use of the sulfonamides and penicillin will elevate the level of penicillin in the blood. It is likewise said that an infection such as pneumonia also may elevate the level of penicillin in the blood. Lower than expected levels of penicillin in the blood are said to occur in patients with congestive heart failure, probably due to depressed absorption.

70. The passage of penicillin from the blood to the subarachnoid space is enhanced in inflammatory states of the meninges. The concentration of penicillin in the spinal fluid, however, is not bactericidal.

71. If cultures do not reveal penicillin-resistant micrococci, penicillin is the drug of choice for furuncles, carbuncles and cellulitis.

72. Penicillin is usually the drug of choice in actinomycosis. It will produce lasting remissions of pelvic, abdominal and cervicofacial forms in 80 to 90 per cent of cases. It also will eliminate the previously fatal pulmonary forms in 50 per cent of cases.

73. In treating bacterial endocarditis with penicillin it is feasible to give the drug by continuous intravenous drip until 3 blood cultures are negative; then it may be given intramuscularly. The penicillin may be delivered intravenously through a polyethylene tube which may be left in place as long as 2 weeks. One should use 25 mg. of heparin sodium per liter of solution in an attempt to prevent thrombophlebitis at the site of injection. Ordinarily only 2 liters of solution are given daily.

74. Three hundred thousand units of penicillin daily at the time of a streptococcal infection may prevent initial or recurrent rheumatic fever. The patient who has had rheumatic fever should receive 100,000 to 200,000 units of penicillin orally 3 times daily for 5 years after the attack in an attempt to eliminate further streptococcal infection. The risk that hemolytic streptococci in the throat may become resistant to penicillin is negligible.

75. Suppurative pericarditis due to a sensitive gram-positive organism should be treated with a daily aspiration of the pericardial sac and instillation of 20,000 units of penicillin in 5 to 10 c.c. of saline solution in addition to penicillin given systemically. One cannot use aureomycin or terramycin in the same way because those drugs are too irritating to serous surfaces.

76. Penicillin is probably of prophylactic, as well as definitive, benefit in the treatment of clostridial infections. Combined penicillin-bacitracin therapy may be indicated.

77. If at all possible give a course of bismuth to a patient with vascular syphilis before penicillin therapy.

78. Both borreliosis (relapsing fever) and rat-bite fever (Haverhill fever) respond very well to penicillin therapy.

79. If the administration of penicillin to patients with streptococcal pharyngitis depresses the formation of type-specific antibodies due to the rapid removal of the antigenic focus, the patient subject to rheumatic fever or glomerulonephritis may be benefited.

80. Penicillin is the drug of choice against *Erysipelothrix rhusiopathiae*, the cause of erysipeloid of Rosenbach. The disease occurs mainly on the hands of meat and fish handlers.

81. Most instances of tonsillitis, sinusitis and otitis media are due to the streptococci. Therefore, penicillin is the drug of choice for such infections.

82. Use of probenecid (benemid) to increase the blood levels of penicillin is not always rewarding. Probenecid may increase the blood level of penicillin 2 to 3 times if the original level is low but unfortunately it will seldom increase the level beyond 2 to 3 units per c.c. if the level is already moderately high.

83. Probenecid does not inhibit the excretion of streptomycin, fortunately. It may encourage higher blood levels of sulfonamides, apparently.

84. Use of the sulfonamides has steadily decreased as less toxic and more effective drugs have been added to the clinician's armamentarium. The sulfonamides still have a place in: (a) preoperative preparation of the bowel (example: sulfasuxidine), (b) infections of the urinary tract (example: gantrisin, elkosin), and (c) certain types of meningitis.

85. The 3 types of meningitis in which the sulfonamides may be used are (a) pneumococcal (in addition to anti-serum, and penicillin given systemically and intrathecally), (b) meningococcal (although good results may also be obtained from systemic and intrathecal use of penicillin), and (c) that due to *Hemophilus influenzae*. For the last type streptomycin also should be given intrathecally; occasionally influenzal meningitis responds well to aureomycin or terramycin.

86. Prolonged oral use of a sulfonamide may decrease the gram-negative bacterial flora with resultant overgrowth of *Streptococcus faecalis*.

87. Use of the sulfonamides has been associated with 3 serious diseases: (a) periarteritis nodosa, (b) lower nephron nephrosis, and (c) depression of the bone marrow.

88. Infections with *Pseudomonas aeruginosa* in the urine, and less frequently in the blood, may call for use of polymyxin B (aerosporin). Sometimes the organism will respond to a combination of aureomycin or terramycin plus streptomycin. Occasionally, if one gets rid of an associated *Proteus vulgaris* infection in the urine, the Pseudomonas will then disappear. Twenty-five milligrams of polymyxin 4 times daily will usually control urinary tract infections; 50 mg. 4 times a day will do in bacteremia. One should stop treatment with the drug as soon as possible (2 to 5 days) because of the neurotoxic and nephrotoxic capacities of polymyxin B.

89. Bacterial endocarditis following urologic manipulation or infection, abortion, pregnancy, or operations on the bowel or associated with a neoplasm of the bowel is usually due to *Streptococcus faecalis*. Such an infection may be implanted on normal valves.

90. Bacterial endocarditis due to the *Streptococcus faecalis* seldom responds to aureomycin or terramycin even when the organism is said to be sensitive in vitro. Perhaps this is because these drugs are bacteriostatic. The same organism will often respond to combined therapy with penicillin and streptomycin even though in vitro studies demonstrate resistance. Perhaps this is so because these drugs are bactericidal.

91. The organisms usually associated with infections of the gallbladder are gram-negative. Therefore, aureomycin or terramycin in addition to streptomycin are the drugs of choice in treatment of infections arising from this source.

92. Because of its propensity to depress the bone marrow, chloramphenicol should be routinely used only in *Salmonella typhosa* infections. Five hundred milligrams every 4 hours should be given for 14 days.

93. No patient with a heart murmur should undergo any operative procedure without prophylactic antibiotic therapy. Penicillin, in combination with streptomycin, should be given 2 days before and 2 days after the day of surgery.

94. There are 3 mycologic diseases in which chemotherapy may prove lifesaving. They and the usual drug of choice in eradicating them are: (a) nocardiosis (sulfonamides), (b) actinomycosis (penicillin), and (c) blastomycosis (stilbamidine).

95. Always be certain that bacteremia is not polymicrobic.

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SELECTION OF PATIENTS FOR PSYCHIATRIC REFERRAL*

MARVIN L. ADLAND, M.D.
Clinical Director, Chestnut Lodge, Inc., Rockville, Maryland

AN OUTSTANDING characteristic of any physician should be his curiosity about his patient. When you take the time to listen to your patient and to learn more about him you are accepting your patient's need to lean on you and unburden himself, and he is made to feel secure with you. Through detailed history-taking, serious evaluation of complaints, thorough physical and laboratory examination, your patient becomes reassured, and he can accept your conclusions, knowing that they come as a result of your consideration of his entire person. In addition to practicing good medicine you have also been practicing good psychotherapy, and as a result of this emotional interaction with you many of your patients can reintegrate their psychologic forces and reassume dealing with life's problems. The simultaneous use of medical and psychiatric technics is not incompatible. Surgical removal of a disfigurement or chemical alteration of a physiologically handicapping state may bring with it marked psychologic relief as well. Psychotherapeutic help may be a prerequisite for the young woman who faces a premature menopause because of a forthcoming bilateral oöphorectomy, and your chemical maintenance of hormonal balances postoperatively may markedly diminish the psychologic tensions. Our concern tonight, however, is with those patients who do not respond to the one or another psychotherapeutic procedures which you daily use in your office and who despite all your efforts persistently present themselves with continuing complaints. Let us concern ourselves with some of the problems involved in selecting and referring a patient to a psychiatrist.

Since the primary therapeutic tool in psychiatry is the doctor-patient relationship, the basis for and the technic of referral is exceedingly important. The procedures carried out in the office have indicated the need for specialist consultation. Referral at this time should be for consultation and not for a specific form of therapy. Psychiatric consultation follows the rules which apply in all medical consultations. It represents a request for an evaluation and a recommendation. The question of what type of psychiatric treatment should, as a rule, be decided by the psychiatrist on the basis of one or more interviews. One may encourage his patient to follow the recommendation or, if he feels otherwise, ask for additional consultation. In a psychiatric referral this is exceedingly important, since a symptom does not determine a course of treatment. Similar symptoms may require widely divergent treatment in two different individuals. A passive, dependent person with a long history of borderline adjustment and a chronic eczematoid condition may require vastly different therapy from a person who is a full-going concern and who develops an acute neurodermatitis in the face of a recent battle with his employer.

The manner of referral has further implications. For example, the already overworked practitioner may somewhat intolerantly refer the aggressive, demanding, unresponsive patient in such a way as to even make an initial evaluative interview a foregone failure. Another situation may arise when the referring physician has high hopes and then feels psychiatrist and patient are both to blame because treatment did not work out or that the symptom disappeared but other symptoms have come in its place. This question could be restated in reverse. I would not refer a suspected malignant lesion for a radical resection. I can only refer the patient to a surgeon for evaluation of a tumor and recommended course of treatment. The surgeon must decide on the nature of the tumor and the treatment of choice in terms of his knowledge of the patient and the disease process. It is much easier on both patient and psychiatrist if it is explained to the patient that there are some questions in your mind (and also possibly the patient's) which require the advice of someone trained to look at these questions and that you suggest the patient see the psychiatrist to "talk things over." Furthermore, the specific treatment suggested may not appear reasonable to the consultant, and conflicting opinions can only shake the patient's confidence in his doctors. Since a symptom is itself not the problem but only an expression of an underlying emotional difficulty, referral for the treatment of a symptom will almost invariably be unsuccessful. Should the symptom as such be removed, the patient may well find himself without any way of coping with his inner psychologic pressures. The patient with the chronic eczema I referred to earlier used this somatic symptom as her only available way of expressing 30 years of pent-up frustration, anger, and futility in living. Until she could come to understand her total self and to integrate without resentment the frustrating aspects of the troubled life which had emotionally handicapped her, thereby freeing the road for finding at least some satisfactory solutions, this sole expression could not be frontally attacked.

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Since treatment revolves around the therapist-patient relationship, considerable thought must be given to the pairing of the two. Some psychiatrists work better with one type of patient than another. Some patients do better with one type of therapist than another. This is all part of the evaluation problem for both the referring physician and the psychiatrist, and the fact that treatment may not prove satisfactory with one psychiatrist is no basis for assuming it will not progress with another.

Let us now examine some of the problems involved in the selection of patients for psychiatric referral. There exists a vast number of people who express their emotional distress via physical symptoms and hence initially consult the general practitioner rather than the psychiatrist. Nowadays these people are not considered to be suffering from "imaginary" or "hysterical" troubles but are recognized as people having difficulty in adjusting to life. In recent years we have learned that there are well-defined correlations between certain types of emotional difficulties and certain types of physical symptoms. The manifestations of these are known as the psychosomatic illnesses. For example, it has been repeatedly demonstrated that people who are unable to find avenues for expression of dependent needs and angry feelings, and who repeatedly find it necessary to repress and keep out of awareness these basic emotions, not infrequently develop demonstrable organic changes in the gastrointestinal, respiratory, and circulatory systems in the form of ulcers, asthma, and hypertension. If the process has gone on for a long period, the organic state may be irreversible, but in any event there is usually considerable need for close coöperation in the medical and psychiatric treatment. Because these patients demonstrate in their illness a long pattern of personality maladjustment, because they present rigid defensive patterns, considerable skill is needed in the treatment of the psychologic factors. At the same time, unless the personality patterns are altered, the physical symptoms will continue to reappear.

To illustrate factors playing a role in the selection of patients for psychotherapy, Alexander[1] presents two interesting examples which may help clarify the problem we are discussing. The first case was that of a 60-year-old businessman who was unable to go beyond the bounds of his garden without the attendance of his wife.

The patient expressed concern about his phobia because it caused him to neglect his business. He explained his illness as "... the aftermath of an acute dermatitis following a sun bath"—he called it "sunstroke." Investigation revealed that the patient was unable to keep pace with his younger partners, and he had consequently become less active in company affairs. The partners were willing to pay him a share of the profits, since his absence served the best interests of the company. Cautious investigation and interpretation evidenced first, complete rejection of any possibility of emotional factors being behind the problem and second, that being a "self-made" man his self-esteem was based exclusively on his accomplishments in business and he had no other emotional resources. In other words, the sickness was the only acceptable excuse for retiring. Therapy was not attempted. The patient had displaced his dependence on his partners to a dependence on his wife and was content to remain at home as the sick man.

The second case is that of another businessman 66 years old who retired from business and then developed spastic colitis and chronic alcoholism. In this case the retirement did not "... hurt the pride to the same extent because his prestige was not so closely connected with business success and had a broader basis." The patient did not shy away from early trial interpretations, but rather was able to expand his outlook by virtue of them, and therapy was successfully directed at changing the "... patient's prestige values and enabling him to accept his age without neurotic protest."

Let us examine some other types of selection problems. There are those people who have functioned in an integrated, constructive manner but who may, in the face of sudden or overwhelming external stress, show acute anxiety symptoms. This anxiety may find its expression in depressive, hysterical, vegetative, compulsive and other symptoms, as the case may be. They may be suitable for treatment because the symptom has its nuisance value, there are no immediate secondary gains, and the patient can look forward to a return to the pre-stress life which contained considerable gratification of needs and wishes. These patients may be sincere in their desire for help and may be close enough in touch with their subjective needs to get them verbalized and defined. At the other end of the scale may be those patients who are limited constitutionally, have had severely disrupted home lives, have demonstrated no long-term constructive patterns, and who, in the face of small stresses, have demonstrated repeated psychotic or near-psychotic breaks. This group presents an extremely difficult problem, since they do not have a concept of what "well-being" might be, and life has been one long, despairing, futile struggle. Obviously, the psychotherapist's evaluation, goals and technics would be considerably different in one group than in the other.

Then there are the general psychoneuroses whose total pattern of living, while not maximally productive and gratifying, still does not lead to grave interpersonal crises. They present themselves with symptoms of chronic mild maladjustment, usually not physical in nature. There may be stories of repeated job failures, chronic marital difficulties, repeated failures in school, and so forth. Although this group, which is by far the largest group seeking psychiatric help, require long and difficult treatment, the expanding horizon of theory and practice of psychiatry has made help available and possible.

Our problem may be examined in another way. One cannot recommend to an indigent patient that he take a sea voyage, or to a mother of 10 children that she lie down for 2 hours each afternoon. So also, you cannot recommend, with hope, to a workmen's compensation neurosis that he hop to it and go back to work, or to an alcoholic that he stop drinking. The compensation neurosis may represent a defense against returning to a job in which the patient, perhaps because of increasing age, is falling behind in production and is being assigned to menial tasks. A return

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THYROIDITIS*

JOHN HUGH LYONS, M.D., F.A.C.S.
Clinical Professor of Surgery, George Washington University School of Medicine

THYROIDITIS is a rather rare condition. Some writers have stated that the thyroid gland possesses an immunity to infection and have suggested that this is due to the high iodine content of the gland. However, the thyroid is also resistant to metastases of malignant tumors, and this cannot be laid to the high iodine content.

According to Means[1] thyroiditis makes up about 1 per cent of the thyroid disorders seen at the Massachusetts General Hospital, and this is the rate of incidence reported by most writers. Yet the records from Touro and Southern Baptist Hospital each show an incidence of about 8 per cent. This has led to the suggestion that thyroiditis may be more common in the Gulf area than in other parts of our country. It is more likely, however, that the explanation lies in the fact that thyroiditis occurs independently of goiter and, since the Gulf area is not an endemic goiter area, the number of goiters is reduced while the number of cases of thyroiditis is not, thus giving a higher rate of incidence without any actual increase in the number of cases.

Thyroiditis has been very poorly understood, and many classifications of it have been made. The following classification is as simple as any and quite satisfactory from the clinical standpoint:

Thyroiditis

1. Acute thyroiditis
    A. Non-suppurative
    B. Suppurative
2. Subacute thyroiditis
3. Chronic thyroiditis
    A. Riedel's struma
    B. Hashimoto's disease
    C. Miscellaneous
        a. Tuberculous thyroiditis
        b. Syphilitic thyroiditis.

The confusion concerning thyroiditis has arisen for 3 reasons. First, each form of thyroiditis has been described under many names. Riedel's struma has been described under 20 different names. The second reason is that at times more than one type have been considered to be the same condition; and the third reason is that conditions which are not inflammatory have been considered thyroiditis. Both nodular goiter and Grave's disease have been thought to be due to inflammation. As late as 1938 Crotti[2] stated that Grave's disease was due to "toxic thyroiditis." Today no one believes that either nodular goiter or Grave's disease is due to inflammation.

It is difficult to give figures showing accurately the frequency of the different types of thyroiditis. In the first place, the incidence of acute thyroiditis, usually a medical disease, is not often given in comparison with the other forms which are fundamentally surgical in nature. In the second place, figures for the other forms vary greatly with different writers; for example, Lasser and Grayzel[3] reported subacute thyroiditis, Hashimoto's disease, and Riedel's struma occurring with about equal frequency in 8 years at the Jewish Hospital in Brooklyn, while Crile[4] reported subacute thyroiditis occurring about 5 times as often as both Hashimoto's disease and Riedel's struma. Means[1] reported acute thyroiditis as occurring approximately as frequently as Hashimoto's disease. It can be said safely that the most frequent form of thyroiditis is the subacute form and the rarest form Riedel's struma, with Hashimoto's disease and acute thyroiditis occurring with about equal frequency.

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It may be of interest to mention briefly the important steps in the acquiring of our knowledge concerning thyroiditis. The acute form was the first form of which we had any knowledge. Crotti[2] states it was described by Carron, Walter, Conrad and others in the eighteenth century.

In 1884 Bowlby[5] first described a case of chronic thyroiditis. He called it an infiltrating fibroma of the thyroid and thought it was malignant and sarcomatous. It was probably a case of Riedel's struma. He stated that the slow growth and absence of disease of the surrounding lymph nodes were noteworthy features.

In 1896 Riedel[6] described 2 cases of fibrosis of the thyroid with firm adhesions to the surrounding structures under the name of Eisenharte strumitis, which means iron-hard inflammation of the thyroid.

In 1904 de Quervain[7] described a giant-cell type of thyroiditis under the term struma granulomatosa. At that time he stated that nonpurulent thyroiditis was a disease *sui generis* with definite clinical and pathologic characteristics.

In 1912 Hashimoto[8] described the disease which bears his name. He published the history and findings in four women who had a diffuse enlargement of the thyroid gland due to lymphocytic infiltration and lymphocytic hyperplasia. He considered this a pathologic and clinical entity and not related to the Eisenharte strumitis of Riedel.

Ewing[9] in 1922 believed that lymphocytic infiltration and hyperplasia and fibrosis of the thyroid were the early and late stages of the same process, which he designated benign granuloma of the thyroid. Naturally his opinion carried great weight and for several years was accepted without question. However, in 1931 Graham[10] and Graham and McCullagh[11] separated the diseases as described by Riedel and Hashimoto, thus casting a shadow on Ewing's opinion. Since then Clute[12] (1935), McClintock and Wright[13] (1937), Joll[14] (1939), Harry[15] (1940), McSwain and Moore[16] (1943), and many others have supported the theory that Riedel's struma and Hashimoto's struma are 2 different diseases, and that is the generally accepted opinion today.

Crile[17] in 1948 published the results of an extensive study which was most enlightening. He showed conclusively that there was a subacute form of thyroiditis, which had been previously described as giant-cell thyroiditis and pseudotuberculous thyroiditis, that was a clinical and pathologic entity, entirely distinct from Riedel's struma and Hashimoto's disease. This condition is most probably the condition described by deQuervain as struma granulomatosa.

The important thing to remember is that the acute cases do not become the subacute or chronic and that the subacute do not become chronic.

Acute nonsuppurative thyroiditis is a disease of young women. Although at times it seems to be a primary condition, it usually follows an infectious disease such as measles, scarlet fever, or typhoid fever, or is secondary to some disease of the mouth or throat.

It must be infectious, but as the cases which go on to suppuration are very rare, and, since the others heal spontaneously in a few days, there is very little opportunity to study either the bacteriology or pathology of the condition. The pathologic process, however, must be rather mild, since it has no effect on the basal metabolic rate, either at the time of the acute inflammation or later.

The onset of the condition is usually sudden, with pain and swelling of the thyroid gland, difficulty on swallowing, pain on extending the neck and in the ear, and fever. The patient is not very sick, and the condition ordinarily clears up gradually in a few days without any residual effects.

Treatment consists of bed rest, plenty of liquids, ice bag to the neck or hot poultices if they are more comfortable, administration of analgesics, and careful observation of the patient to detect any sign of the development of suppuration. The administration of antibiotics may be of value to prevent the possibility of suppuration.

Acute suppurative thyroiditis is a development of the nonsuppurative form, and the symptoms are quite similar. But in the suppurative form they are more severe and in addition signs of suppuration supervene. The abscess may rupture into the structures of the neck, the trachea or esophagus, or into the mediastinum. Early evacuation of the abscess with adequate drainage is essential and the administration of antibiotics indicated. Streptococci, staphylococci, and pneumococci are usually the causative agents. In the great majority of cases the process will clear up rapidly without leaving any permanent effect on the function of the gland.

There is a rare form of acute thyroiditis which deserves mention, namely, typhoid thyroiditis. This condition was first described by Bauchet[18] in 1857, and there are less than 25 cases in the American and European literature documented with positive typhoid cultures. This form of thyroiditis may appear months or years after the attack of enteric fever without any intervening symptoms. This behavior of the *Salmonella typhosa* is not particularly surprising when we recall that gallbladder disease, osteomyelitis, periostitis, and splenic abscess due to the same organism often occur many years after the original attack of typhoid fever.

Brenizer[19] recently reported a woman who developed a mass in the thyroid region 5 years after her attack of typhoid fever without any intervening symptoms. This was incised and a persistent sinus developed. At the time she was first seen by Dr. Brenizer she had had intermittent drainage from the sinus for 19 years. Culture of the discharge from the sinus showed a pure culture of *Salmonella typhosa*. The patient was cured by resection of the left lobe of the thyroid, wide excision of the drainage tract, and sliding of a flap of skin from the chest.

As mentioned before, subacute thyroiditis is the same condition as that which has been described under the names pseudotuberculous thyroiditis, giant-cell thyroiditis, and chronic nonspecific thyroiditis. Like acute thyroiditis, it is predominantly a disease of women, occurring in the ratio of about 6 to 1. Most of the cases are in the middle forties, a little older than the acute cases.

The cause of this condition is unknown. Only a small percentage of the cases follow infection elsewhere in the body, and it has not been possible to identify any bacteria as the cause of the disease. Furthermore, it has not been possible to demonstrate the tubercle bacillus. The possibility of some virus being the causative agent has not been ruled out.

The entire gland is symmetrically swollen to two or three times normal size, and the cut surface of the gland is white and avascular. Microscopically there is present a diffuse subacute inflammation, with leukocytic infiltration and the formation of giant cells and structures resembling tubercles, thus giving rise to the terms giant-cell thyroiditis and pseudotuberculous thyroiditis. The giant cells and pseudotubercules are believed to represent a foreign body reaction toward colloid.

The onset of this disease is sudden with exquisite tenderness in the thyroid gland and pain on swallowing and pain radiating back of the ears. The temperature is slightly elevated and the sedimentation rate considerably so. There is a marked systemic reaction, and the patient is weak, tired, and nervous. The pulse is elevated out of proportion to the temperature. Occasionally the basal metabolic rate is slightly elevated.

The disease is self-limiting and runs its course in a few weeks or months. Like the acute forms it does not permanently alter the function of the thyroid gland.

Subacute thyroiditis responds quickly and very satisfactorily to radiation. Usually about 700 r is all that is necessary. The pain and tenderness promptly disappear, and the whole process resolves in a few weeks. Partial thyroidectomy will also effect a cure, but since the disease is self-limiting and radiation so successful, operation is indicated only when the diagnosis is uncertain. Thiouracil may be of value by limiting the production of colloid.

The cause of Riedel's struma is not known. About a third of the cases occur in men, and the average age of the patient is 43 years, with most of the cases occurring between 30 and 60. Infection has never been established as the causative agent. DeCourcy[20] (1942) advanced the theory that Riedel's struma is the result of a previous perithyroiditis, which causes constriction of the vessels entering the glands.

The thyroid gland is slightly enlarged and stony hard. In about a half of the cases the involvement is unilateral. The normal thyroid tissue is replaced by dense fibrous tissue, and the cut surface of the gland is white and glistening. The gland is densely adherent to the surrounding structures.

The onset of the condition is gradual. At first the only symptom is the presence of the stony hard goiter, but later pressure symptoms and myxedema appear. Pressure symptoms are more prominent than in any other thyroid condition. Dyspnea, dysphagia and hoarseness may cause the patient to seek relief. Myxedema is always present late in the disease.

It is impossible to differentiate Riedel's struma from cancer by history and physical examination, but the absence of enlarged lymph nodes and the presence of hypothyroidism may help to establish the diagnosis, for palpable lymph nodes do not occur in Riedel's struma and hypothyroidism and myxedema are not part of the picture in cancer of the thyroid.

The treatment of Riedel's struma is surgical. Pressure symptoms frequently require operation and even when the condition is practically symptomless operation is necessary to rule out malignancy.

When the diagnosis of Riedel's struma is established at operation as much as possible of the involved portion of the gland should be removed. The operation is usually exceedingly difficult, because the thyroid gland is densely adherent to the surrounding structures. Sometimes it is advisable to restrict the operation to resection of the anterior part of the gland, and occasionally, when the operation is extremely difficult and risky, resection of the isthmus to relieve the constriction of the trachea is the proper procedure. If an adenoma appears to be the center of the process, it has been suggested that shelling out the adenoma will arrest the process. It should be borne in mind that most of the cases of Riedel's struma will eventually go on to hypothyroidism or even myxedema, which can be satisfactorily controlled.

A short, rather literal translation of Riedel's description of his first case may be of interest. "A man of 42 years came to me for treatment. He had noticed an increase in the size of his thyroid accompanied by rather considerable breathing difficulties. I found a tumor extending to both sides; it was not very large, but extremely hard and immovable. I assumed that this was a case of malignant struma. On 30 November, 1883 I attempted an operation and exposed the tumor. I soon saw that it adhered very firmly on both sides to the carotid artery and the internal jugular vein, and resected a piece of the internal jugular vein. Then, after removing a part of the struma of the size of a walnut, I discontinued the operation, because I was compelled to consider the case inoperable. Uneventful recovery; discharged with healed wound on 17 December, 1883. The patient presented himself several times; every time he was more satisfied with his condition. The breathing difficulties had ceased. After 6 months the patient said he was completely well and able to do his work. In the meantime we had examined the specimen and determined that there was no trace of a neoplasm. It was an inflammatory process, infiltration with round cells could be demonstrated; carcinoma and sarcoma could be excluded; likewise syphilis and tuberculosis were absent."

Hashimoto's disease occurs almost exclusively in women, and the average of the patients is 47 years. It has never been established that it is infectious in origin. In fact, there is considerable reason for considering it a metabolic, regressive or degenerative disease, since many of the patients give a long history of being below par, a condition which persists in spite of treatment. Many show achlorhydria and many a secondary anemia. McCarrison[21] was able to produce a condition similar to Hashimoto's disease on rats by feeding a vitamin-deficient diet.

In Hashimoto's disease the thyroid is moderately and diffusely enlarged, and its cut surface is light yellowish gray and somewhat lobulated, suggesting the presence of adenomas. The gland is not adherent to the surrounding structures. Microscopically there is marked lymphoid infiltration with formation of many lymphoid follicles. Atrophy of the parenchyma and fibrosis is also present to some extent. Foreign body giant cells are occasionally seen.

The onset of Hashimoto's disease is gradual, and often the only symptom is the presence of the goiter. Some of the patients complain of pressure symptoms, but these are usually not prominent. In this respect Hashimoto's disease differs markedly from Riedel's struma. Sometimes the gland is sensitive. As mentioned before many of the patients are not in good health, and if the condition has been present a long time symptoms of hyperthyroidism or even of myxedema may be present.

Hashimoto's goiter is so seldom encountered that it has been difficult to arrive at the proper treatment. There is considerable reason to believe that X-ray therapy is effective, and that would be expected because of the lymphoid nature of the condition. If the diagnosis can be made previous to operation, X-ray therapy should be used. If the condition is suspected before operation, a needle biopsy may establish the diagnosis. If the diagnosis is only made at operation a conservative resection should be carried out. This will relieve the pressure symptoms and the pain if present and also remove the unsightly swelling. It is well to remember that patients with this disease are not well before operation and probably will not be afterwards. It is also well to remember that, untreated or treated, the patient with this condition will go on to a severe hypothyroidism.

Although Hashimoto was a Japanese, his paper first describing the condition which has been named after him was written in German and was interspersed with many Latin phrases. It is rather long, about 8,000 words, but well worth reading, and a literal translation of his final statement is as follows:

"Summarizing, I arrive at the following final statement:

1. There is a type of struma which I have called struma lymphomatosa and which is characterized histologically by a strong proliferation of the lymphatic elements, particularly of the lymphoid follicles, and by certain parenchymatous and interstitial changes.

2. The advanced form of struma lymphomatosa presents a strikingly hard consistency of the gland, which may simulate a malignant tumor.

3. The further course after operation usually required a long time for the patient to recover completely.

4. Prognosis *quoad vitam* is favorable.

5. Surgical intervention brings about disappearance of the tumor, but one must be careful not to resect too much. It is not harmful to leave part of the tumor. As time goes on it disappears spontaneously."

It has been pointed out previously that although Ewing and several other writers considered Riedel's struma to be the terminal stage of Hashimoto's disease, it is now generally accepted that they are distinct entities. This belief is strongly supported by the 4 following facts:

1. Hashimoto's disease occurs almost entirely in women, whereas in Riedel's struma only two thirds of the cases occur in women.

2. Hashimoto's disease is practically always bilateral, whereas approximately one half of the cases of Riedel's struma are unilateral.

3. Riedel's struma is frequently associated with adenomata whereas they are practically never seen in Hashimoto's disease.

4. The average age of patients with Hashi-

moto's disease is 47 years, and the average age of patients with Riedel's struma, which Ewing considered to be the late stage of Hashimoto's disease, is 43 years.

The last two forms of chronic thyroiditis, namely, tuberculous and syphilitic, will be dismissed briefly, since they are very rare and besides are not clinical entities per se.

Rokitansky[22] in 1861 stated that tuberculosis was not to be found in the thyroid gland and Virchow[23] in 1864 stated that there was some antagonistic action between goiter and tuberculosis and that the presence of a goiter was proof that the subject was not tuberculous. Today most investigators believe that the thyroid does possess some immunity to the tubercle bacillus. However, tuberculosis of the thyroid was produced in dogs by Torri[24] by injection of a suspension of tubercle bacilli into the thyroid artery, and in rabbits and guinea pigs by Roger and Garnier[25] by injection into the carotid artery. It is interesting that Rankin and Graham[26] in 1932 found that out of 20,758 thyroidectomies performed at the Mayo Clinic tuberculosis was found in 21 cases, an incidence of 0.1 per cent. Crotti[2] and Plummer and Broders[27] believe that the frequency of association of tuberculosis and Grave's disease was too high to be coincidental.

Diagnosis of tuberculosis of the thyroid is very seldom made before operation but should be suspected when there is an etiologic focus in the body. There are no clinical features which are characteristic, and the gland usually passes for an adenomatous goiter or in the presence of pus for an ordinary abscess.

The treatment is essentially surgical, the procedure being indicated by the findings. The local prognosis is good.

Syphilitic thyroiditis is very rare. It has been reported in the dead fetus, in congenital syphilis and in the acquired cases. Gumma is the most common form, but general involvement of the gland may occur during the second stage. Most of the cases have responded well to antisyphilitic treatment, but operation may be necessary in case the diagnosis is uncertain.

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ENDOMETRIOSIS

ROLAND BIEREN, M.D., F.A.C.S.
Gynecologist, Group Health Association, Washington

WHEN a woman has a lower abdominal painful condition that evades diagnosis, endometriosis is invariably suggested. The fact that the condition is reported to be an ever-increasing source of pain, dysmenorrhea and infertility in private patients is probably responsible for this. Javert[1] reports a clinic incidence of 5.61 per cent, which is exceptionally high. It is doubtful that so high an incidence will occur in one's private practice. A review of the medical records of 5,420 individual women discloses a total of 27 cases of endometriosis of sufficient extent to produce symptoms and require surgical correction. This is an incidence of approximately 0.5 per cent. Actually, it is amazing how much gross pathology can accumulate in these individuals before they present themselves for examination.

Endometriosis might be defined as a condition in which tissue resembling endometrium occurs in extra-uterine locations. Normally such tissue is present only as a lining of the uterine cavity. In endometriosis it occurs elsewhere in the generative tract, in the abdomen, in the urinary tract, and in remote parts of the body. In the so-called "internal" form the myometrium of the uterine corpus is involved, and this lesion is properly called adenomyosis. In the genital type, also called "external," the ovaries, the pelvic peritoneum and the ligaments are the common sites of occurrence, with the formation of endometrial or "chocolate" cysts. Infertility, myomatous tumors, uterine retroversion, and chronic salpingitis commonly accompany genital endometriosis. Extragenital lesions are most common in the abdomen and adjacent tissues and usually accompany lesions in the generative tract but may occur as independent foci. Common sites are the large and small bowel, omentum, umbilicus, incision scars, urinary tract, and the pelvic and inguinal lymph nodes. Single, authentic lesions have occurred in such remote parts of the body as the posterior thigh and the pleura. From the standpoint of clinical diagnosis and therapy one need only consider generative tract lesions and those within or closely adjacent to the abdomen.

About half of the instances of endometriosis reported pathologically or at operation represent an incidental finding. Small, inconsequential "chocolate" cysts found in this manner should not necessarily be blamed for the patient's symptoms, nor should they be considered the primary diagnosis. It is an error to go to great lengths to eradicate them completely. Often a conscientious pathologist will find tiny nests of endometrial tissue in a specimen removed for another condition. In each of the 27 cases cited in this report the amount of pathology found at operation was so extensive that one wondered why serious disability had not resulted sooner. In accepting a previously made diagnosis one must remain skeptical until the diagnosis can be confirmed by a transcript of the surgical and pathologic record. One patient presented herself with the history of 2 abdominal operations followed by a castrating dose of X-rays at the age of 36 for endometriosis. She described each seizure of abdominal pain as excruciating. When first seen she was still having such seizures of pain despite the surgery and X-ray treatments. Further study revealed a highly suggestible, psychoneurotic individual with an irritable colon. After some delay a transcript of the surgical record was obtained from the operation during which the diagnosis had been made. The single "chocolate" cyst described was exactly 2 cm. in diameter and was swinging freely on a slender pedicle.

Sampson's original theory was that retrograde menstruation associated with retroversion was responsible for the condition. TeLinde and Scott[2] have observed that transplanted endometrial cells in the abdomen of the rhesus monkey can result in endometriosis. They further demonstrated that diverting the endometrial flow to the abdominal cavity of the same animal can result in massive lesions. An offshoot of Sampson's theory was the idea that uncorrected retroversion could cause endometriosis. Similar theories held that curettage, tubal insufflation and uterosalpingograms could do likewise. None of these ideas has any validity to back it up. Asymptomatic retroversion per se requires no treatment nor should we be deterred from making adequate studies of infertile women. Retrograde menstruation fails to explain many of the lesions. Javert[1] reports instances of nonmalignant invasion of the myometrium and of blood and lymph vessels and has suggested an invasive theory. A third theory is that metaplasia converts nests of primitive cells into endometrium under the influence of some as yet unknown stimulus. Dardin[3] defines metaplasia as "the unexplainable transformation of the mesodermal peritoneal cell into a specific glandular cell." He also suggests that this potential power resides in all mesodermal cells. The actual answer is simply not known. Endometriosis is rare in negroes and uncommon in lower income groups. It appears to be most common in private women patients between the ages of 25 and 35 who have not borne children. Klüver and Bartelmez[4] report an interesting case of the condition in a female rhesus monkey which had undergone several experimental cerebral lobectomies. They suggest that an endocrine imbalance induced by the brain surgery might be responsible.

In order to arrive at the clinical diagnosis of endometriosis there must be present both symptoms and a definite mass on vaginal examination. When a mass is found, it should be checked again after a cleansing enema. I can recall several instances of a tender pelvic mass being completely relieved by a nurse known to be dexterous in the use of an enema can. It may be impossible to examine adequately a highly psychoneurotic woman without an anesthetic. Psychoneurotic women can and do develop endometriosis, and the mere fact that a woman is undergoing psychotherapy should not deter the physician from making an adequate examination. Adenomyosis may be impossible to diagnose short of hysterectomy. The invasion of strands and masses of endometrial tissue into the myometrium sometimes produces a globular enlargement of the uterus. When such is found with a record of persistent menorrhagia the condition may be inferred to be present. On some occasions the diagnosis can be made by curettage or by a uterogram. Most cases are diagnosed by the pathologist after hysterectomy. One of the patients reported here was a woman of 35 who complained of excessive menses and recent episodes of intermenstrual bleeding. Vaginal examination revealed a large, globular uterine corpus. On inspection a polypoid mass of tissue 1.5 cm. in diameter was seen protruding from the cervix. This was excised with a biopsy forceps in the office. Two days later the pathologist phoned to report that the section looked like a low-grade endometrial adenocarcinoma. The woman was hospitalized and total abdominal hysterectomy and bilateral salpingo-oöphorectomy were performed. Further study proved the lesion to be an extensive but completely benign case of endometriosis of the uterus.

Apart from adenomyosis the lesions of endometriosis are characterized by the formation of "chocolate" cysts, so-called because the content of old, unclotted blood resembles chocolate syrup in consistency and color. When the nest of endometrial tissue becomes activated by some unknown stimulus it bleeds with each menstrual period. As the monthly accumulation increases it is contained within an envoloping mantle of fibrous tissue. If the cyst is in a location where it is relatively free it can attain considerable size before symptoms are produced. If it is adherent to other structures there is a limit to its size before pressure symptoms are produced. It is this limit that determines when symptoms will occur. A woman at present under periodic observation has been infertile many years. Two years ago vaginal examination revealed merely an adherent retroversion. Since then she has gradually developed progressive dysmenorrhea. A year ago distinct thickening of the uterosacral ligaments could be determined by palpation. At a recent examination these ligaments were as thick as the index finger and there was a definite mass in the cul-de-sac in addition to the uterine corpus. For one day her menstrual pain is almost unbearable, but, as it would greatly inconvenience her to undergo surgery now, she is to wait until she can arrange suitable time off from her job. When a urologic lesion is present hematuria may ensue. This can easily be overlooked during a menstrual period unless a catheterized specimen of urine is obtained.

Complications of endometriosis, while not common, may be serious. Involvement of the bowel may cause intestinal obstruction. Cases have been reported in which such a lesion of the rectosigmoid has been misdiagnosed as cancer of the large bowel. A "chocolate" cyst can rupture with the development of an "acute abdomen." This occurred in 1 case of this series. The preoperative diagnosis was probable ruptured ectopic pregnancy. At operation a hematoperitoneum was found originating from a ruptured hematosalpinx on the left. There was an unruptured hematosalpinx on the right. The pathologic report was endometriosis. Pregnancy in an adherent, retroverted uterus may terminate by abortion simply because the uterus will not come up out of the pelvis. This event threatened in 1 patient with interesting further complications. She had been treated for infertility for several years. Once she conceived but lost the fetus by spontaneous abortion. Now, at the age of 29 she was entering the fourth month of a second pregnancy. Six months before she became pregnant she had an emergency appendectomy. The surgeon noted a small "chocolate" cyst and adhesions in the region of the left ovary which he did not disturb because to do so would necessitate another incision. During the third month she had considerable abdominal pain and her left leg began to swell. Now her pain was almost unbearable and the leg was nearly twice its normal diameter. After hospitalization she was put in the knee-chest position for manipulation without success after several attempts. Finally she was subjected to laparotomy, and a single, dense band of adhesions was found to be holding the uterus. When this was released the organ literally "popped" up into the abdomen.

Treatment varies with the individual. Although there have been rare instances of adenocarcinoma proved to develop in an endometriosis lesion, such a possibility is highly remote in the individual case and should not deter the surgeon from saving ovarian tissue in younger women. When preservation of menstrual and child-bearing function is desirable, resection of the individual lesions is the treatment of choice. In an older woman for whom pregnancy is no longer desired the surgeon can be more radical. It is often impossible or unwise to resect completely massive lesions. With recurrent, painful, unresectable lesions roentgen castration may be used as a final resort.

Full-blown, painful "chocolate" cysts have been reported in women as young as 19. The youngest patient in this report was a 21-year-old unmarried girl. For 4 months she had recurrent episodes of upper abdominal pain which defied diagnosis. Her last attack coincided with the onset of a menstrual period and she then developed severe lower abdominal pain as well. On vaginal examination the pelvis was found to be filled with a tense, tender, cystic mass. At surgery this was discovered to be a typical endometrial cyst involving an ovary. Stuck fast in the center of the cyst was a 6-inch loop of jejunum and it was probably the source of the upper abdominal discomfort.

A policy of conservative surgery in younger women can pay excellent dividends. One woman in this series was first seen at the age of 23 with

(*Continued on page 338*)

President's Page

MEDICINE AND THE PRESS

Publicity of the right kind is important for medicine. In the first place, we want people to think well of us, and, in the second, the people should be kept informed of advances in medicine. In a sense, we are at the mercy of the newspapers and magazines. Editors want matter of "news value." This means something new, sensational or controversial. Often this means some distortion, even though the news is accurately reported. New things and dramatic events in medicine often lack the test of time and verification by several investigations, and they excite patients and cause them to demand their use prematurely by their physicians before the latter have acquired adequate information to apply them intelligently. Controversial issues often make one of the parties appear selfish or unreasonable, such as the campaign of organized medicine against compulsory health insurance. On the whole, however, the reporters have done a good job, and I, personally, have found them to be understanding and honorable.

It is difficult for people to realize why it is unethical for doctors to give out news about themselves. This concept came about to protect the public from quacks and dishonest members of the profession. It is ethical, however, to have items appear in newsprint when science reporters get their information at medical conventions or from first-class medical journals. The same rule applies to medical institutions.

Fortunately, most of our newspapers refuse to use advertising matter from shady practitioners of the "healing arts," which eliminates most advertising of this nature, since ethical physicians do not advertise. One still sees large spreads in some of the western newspapers of the most extravagant claims and tawdry bargain prices. The press has a great responsibility to suppress such material as being against the public interest. Our Washington newspapers have accepted this responsibility to the fullest.

I have been impressed with the fine presentations of medical subjects on the radio and over television. By and large they have done much for medical public relations and to give the people the proper perspective on many phases of medicine.

Physicians soon come to know how ignorant most people are about medical things. Therefore, they must be very patient in explaining matters that affect their health. I am afraid that many news reports merely add confusion, not because the material is inaccurate, but because the educational background of the reader is not adequate to grasp it.

How to approach this matter of educating the laity is difficult. Perhaps simplified, required courses in high school would be the best method if there were enough teachers with the proper knowledge. Otherwise physicians in their offices will have to give most of the instruction, aided by good articles in newspapers and periodicals by competent science writers and by radio and television programs. In addition, it should be noted that the American Medical Association publishes an excellent medical journal for the public, *Today's Health*, as do the Seventh Day Adventists with their magazine, *Life and Health.*

Wallace M. Yater

Editorials

GUILLAIN-BARRÉ SYNDROME

The Guillain-Barré syndrome has almost as many names as it has mysteries about its pathogenesis. Thus, besides the eponymic designation, this disorder has been called polyradiculoneuritis, myeloradiculitis, polyneuritis with facial diplegia, infectious polyneuritis, and infective (or infectious) neuronitis. In a recent review of the subject in *The Journal of the American Medical Association* for April 25, 1953, Von Hagen and Baker mentioned all these terms and favored using either the eponym or infectious neuronitis. Since the cause of the neuronitis is unknown, it is hard to understand their preference for the adjective "infectious" except on the grounds that the neurologic disorder often develops a few days or weeks after a mild infection.

As described by Von Hagen and Baker, the onset of the syndrome usually is marked by the appearance of paresthesias and pains in the extremities, mainly the lower extremities. Soon afterward motor weakness develops, and thereafter motor signs predominate. Paralysis of one or both sides of the face may appear at any time. Disturbances of sphincter control, indicating spinal cord involvement, are observed in severe cases. The spinal fluid is usually normal except for an increase in protein content. It is now understood that such elevation of protein without proportionate pleocytosis (albuminocytologic dissociation) is by no means distinctive for this disorder.

In early writings on this subject the syndrome was said to be so benign that all patients should recover. As more cases were recorded, it became apparent that such an optimistic attitude was quite unjustified. Indeed, a mortality rate of 42 per cent was reported in one clinical study, that of Forster and co-workers in the *New England Journal of Medicine* for July 10, 1941. Apparently the prognosis has been especially evil in patients having respiratory paralysis. The experience of Von Hagen and Baker somewhat lightens the prospect by demonstrating that improved methods of therapy have considerably reduced the mortality rate. Of their 23 patients, 8 had respiratory paralysis of such severity that respirator care was necessary, yet there were only 2 deaths in the entire group.

The chief advances in therapy concern better management of respiratory embarrassment, with emphasis on prompt use of the respirator for such early signs of hypoxia as wakefulness, restlessness, fatigue, anxiety, mental confusion, and play of the accessory respiratory muscles in the neck and abdomen. Also, Von Hagen and Baker emphasized the advantages of tracheotomy for maintenance of a clear airway in difficult respirator cases.

These authors included in their therapeutic regimen parenteral administration of 50 to 100 mg. of thiamine daily and 1 c.c. of crude liver extract 3 times weekly in combination with dimercaprol (BAL), 2.5 mg. per kilogram of body weight every 6 hours.

Although clinical evidence of the efficacy of these drugs is difficult to provide, the rationale for their use is of more than passing interest. Thus, there is good experimental and clinical evidence that various neuropathies result from disturbances of enzyme metabolism of the neurons. The pyruvate-oxidase system has been especially implicated. Dimercaprol has been ad-

Opinions expressed in contributions to the Editorial Section are those of the writers and do not necessarily reflect the views of The Medical Society of the District of Columbia.

vocated, therefore, because it is known to counteract the inhibition of the pyruvate-oxidase system that results from lewisite poisoning, and because it has been shown to exert a favorable influence upon pyruvate metabolism in some patients having polyneuritis. Similarly, elements of the vitamin-B complex are known to be coenzymes essential for pyruvate oxidation—hence for normal pyruvate metabolism. Under the circumstances, continued empirical use of these agents seems justified.

H. H. H.

A CROW TO PICK

Everyone is prone to take liberties in the use of our language for informal speech. In many instances this adds color to our conversation. Similar usage in written form should probably be avoided.

One expression that is particularly annoying to me is the use of the word *pathology* to signify abnormality or disease. All of us are guilty. The radiologist in his written report may say, "There is no pathology in the chest." The consultant may note, "I suspect pathology in the liver." Even the pathologist may say, "There is no demonstrable pathology."

Pathology is, of course, one of the medical sciences, and a field of specialty practice. It is the study of disease processes; it is not the disease process itself. And yet this bastard usage of the word *pathology* is so ingrained that I am sure nothing will change it.

Another common and related slip of the tongue or pen is the use of the term *serology* when a serologic test for syphilis is meant. We say, "The serology is negative." Serology is, of course, the science dealing with the composition and properties of blood serum; it is not the results of a specific test employing serologic technics.

The word *malignancy* is commonly used in place of the more correct form *malignant tumor*. *Malignancy* is a term which may be used to designate a harmful or threatening potentiality. Malignancy is a characteristic of certain tumors, as it is of many other diseases, indicating their capacity to produce death. It is not the malignant tumor itself.

The use of the terms *pathology*, *serology*, or *malignancy* in this erroneous manner cannot be justified by calling it a figure of speech. If it were, it would undoubtedly be that figure of speech known as metonymy, in which some familiar symbol is used in the place of the thing signified. Thus we may say correctly, "the power of the throne"; in this expression *throne* signifies the ruling monarch. But *pathology*, *serology*, and *malignancy* are abstract terms signifying something which has no substance. Hence they cannot be said to be symbolic.

Common usage sometimes gives such forms a cloak of respectability. Webster's New International Dictionary lists as one of the secondary meanings of pathology, "The morbid changes, collectively, arising in disease; the condition, as of an organ, tissue or fluid, produced by disease." In spite of this recognition of misuse, I maintain that it is improper. It would be equally improper to say, after completing a pelvic examination in a female, "I find no evidence of gynecology in this woman"; or even, on a cloudy night, to say, "I can't see any astronomy out tonight."

It seems somewhat less objectionable to use *X-ray* to denote a radiograph. Strictly speaking, of course, X-rays are electromagnetic emanations from the X-ray tube. This may possibly be considered a figure of speech, if we grant, as the physicists do, that X-rays have substance and therefore may be symbolic. Many object to this usage too.

There are many other terms which we use carelessly. Possibly their misuse can be condoned in informal conversation. But is it asking too much to suggest that our writings be more precise?

T. M. P.

THE FAMILY DOCTOR AND MENTAL HEALTH PROGRAMS

It is a most disturbing fact that with the exception of an inadequately small number of psychiatrists, the medical profession as a whole has exhibited little organized reaction to the implications inherent in the problems of mental health.

The chaotic condition of modern life has raised public interest in mental health to an unprecedented level. Lecturers on mental health problems speak to overflow audiences, and mental health clinics are swamped by the vast numbers of those seeking psychiatric services. The medical profession as a coöperating group has with greater or less success organized and planned attacks on physical disease, but there is a woeful lack of understanding that the problems of mental health are fully as enormous in their complexity as is the whole field of physical health.

It has been estimated that half of the hospital beds in the United States are occupied by victims of mental illness. This ominously large number of patients, however, is only a small percentage of the population whose mental illnesses cause such havoc in the social life of the community. Dr. Martha Eliot, Chief of the Children's Bureau, estimated in July, 1952 that there are committed each year 1,750,000 serious crimes and that 1,500,000 children between the ages of 7 and 17 are picked up by the police and 350,000 brought to juvenile courts. There are 50,000 narcotic addicts and 950,000 confirmed chronic alcoholics. There are about 17,000 suicides each year and 1 divorce in every 4 marriages. This is an ominous picture of emotional illness.

The Division of Psychiatry and Neurology of the Veterans Administration and the National Institute of Mental Health of the United States Public Health Service have programs of significant scope. Much has been published on the methods of formulating mental health programs on national, state and community levels. Nine states have independent departments of mental hygiene, and in most of the other states the problems of mental health are under the supervision of the departments of welfare.

In summarizing the assets available for the carrying out of these programs, there are listed nurses, social workers, health departments, clinical psychologists, parent-teacher and citizen groups, recreational and occupational therapists, industrial supervisors and physiotherapists. But a careful review of the voluminous literature fails to reveal in even a single instance the mention of a group that should prove to be indispensable if the proposed plans are to be successful, namely, the family doctors.

The blame for this lack of rapport between the thousands of general practitioners and those in charge of promulgating mental health programs should be shared equally by both groups. The practitioner has been too busy to volunteer his services and has appeared indifferent. In most cases, however, his seeming indifference is due to a lack of understanding of the enormity of the problems involved and ignorance of the services of mental health groups available in his community. On the other hand, the mental health groups have been remiss in failing to apprise the physicians, through their medical societies and other channels, of the availability and scope of such services. There is also an unfortunate lack of coöperation between family physicians and psychiatrists in specific cases in which both are interested. This is particularly true where disease or physical handicaps are important factors in the production of mental illness.

A majority of mental illnesses have their incipiency in childhood and adolescence. It is in these important years that the family doctor-patient relationship should be of the utmost importance if properly integrated with specialized psychiatric help.

Occasionally frank schizophrenia appears at the age of 4 or 5 years, but ordinarily it is an adolescent behavior problem. The family doctor need not be a trained psychiatrist to recognize that recurring episodes of severe anxiety, of stark terror, or other behavior aberrations in preadolescent children are potent warnings of the need for thorough investigation of the problem before complete regression to the tension relief of infantile fantasy occurs. The family doctor's intimate knowledge of complex family problems, which many times are concealed from the psychiatric adviser, may represent the difference between success and failure in therapy.

From the intrinsic nature of his troubles, the mentally ill person is all too frequently financially unable to pay for treatment, and the care of such patients becomes a problem for publicly supported agencies. It is estimated that only 2 per cent of beds occupied by the mentally ill are in private institutions. If programs are to be successful in lessening the number of incapacitating mental illnesses, there must be a closer cooperation between public agencies and a well informed body of family doctors educated to be the first to recognize danger signs.

R. L. S.

SEVENTY-FIVE YEARS OF MEDICAL PROGRESS 1878–1953

In traveling along life's highway it is an altogether good practice to stop occasionally and take one's bearings. It affords an opportunity to look forward to judge of the terrain and the problems that lie ahead; it is good also to look back and review the experiences of the past. Such retrospection can especially be very useful, since it deals with positive experiences. Accordingly, it can warn us against repeating past mistakes; in turn it can stimulate and sustain us to continued and renewed effort.

Such an opportunity presented itself at the First Western Hemisphere Conference of the World Medical Association, which was held in conjunction with the Pan American Medical Confederation in Richmond, Virginia, April 22–25, this year. The field surveyed at the Richmond Conference was wide. The delegates looked back upon 75 years of unprecedented medical progress and looked forward to even more epochal discoveries in the future. Thanks are due to the Richmond pharmaceutical firm of A. H. Robins Company, which, by a generous grant, underwrote the expenses of the entire Conference.

Delegates from Latin America and Canada exchanged views with specialists of the United States on practices and experiences in medical education, medical aspects of social security, heart and vascular surgery, psychiatry in everyday medicine, and the present usefulness of cortisone, to mention but a few of the many subjects brought up for discussion.

The record of medical progress in the United States through the past 75 years is both impressive and most encouraging. Further extension of the average life span, now at 68, is confidently expected. Maternal mortality, now at less than 2 per 1,000 deliveries, can be further reduced. Present knowledge of proper dietary regulation and insulin therapy will allow hundreds of thousands of juvenile diabetics to live into adult life and to live essentially normal lives.

The advent of the sulfonamides and the antibiotics has permitted exploits in chest, brain and temporal bone surgery in a manner hitherto not dreamt of.

We are witnessing the disappearance of the venereal diseases in most of the civilized countries.

The campaign against insect-borne infections such as malaria and yellow fever is making satisfactory progress.

The application of present known methods of treatment and care could prevent all cases of blindness due to trachoma, ophthalmia neonatorum, general ocular infections, cataract, detached retina, nutritional diseases, and even glaucoma.

Manifestly this is only a partial listing of what the Conference hailed as achievements in the practice of the healing arts within the past 75 years.

There was also a wholesome awareness of the many unsolved problems that confront medicine today. Among these cancer occupies a position of prominence. Neither surgery nor radiation therapy—indispensable and invaluable though they are at present—are looked upon as the final answer in dealing with this malady. The hope and conviction is for some biochemical product that will, it is confidently believed, in the not too distant future bring ultimate victory.

Another problem that looms large is represented in the rehabilitation of the chronically ill or disabled. The trend in all nations is toward a greatly increased life expectancy, with the result that throughout the world we are producing an aging population. Medicine's number one problem in many parts of the world is no longer the acute communicable diseases, but the slow, insidious processes of the chronic diseases, and the accidents and the disabilities which they leave in their wake. Until recent years the great majority of the medical profession looked upon rehabilitation as something which had little alliance with medicine. Today that trend is being reversed. Medicine is beginning to recognize that medical care cannot be considered complete until the patient with residual physical disability has been treated "to live and work with what he has left."

Manifestly it is quite impossible to present here all that was brought before the Conference through 20 panel discussions. However, mention at least must be made of two subjects which, while not new, nevertheless were considered of greatest importance. These concerned medical education and the physician-patient relationship.

Granting that present teaching facilities are most elaborate, it was recognized that the curricula are overcrowded with matters that belong to the specialties and with a multiplicity of diagnostic procedures. It was felt that more time should be given to train the student in careful observation of the entire patient and to evaluate symptoms against the background of the complete picture. Again, also, it was emphasized that the successful practice of medicine remains an art that cannot be replaced by cold, impersonal, mechanical laboratory procedures. The physician must have the full confidence of the patient and this in turn can be had only when the physician has a sympathetic and understanding heart.

Finally, it seems well to keep in mind the aims and purposes of the World Medical Association which now are being promoted through 43 national medical associations and about 700,000 individual physicians. The WMA realizes that sickness knows no national boundaries and that illness with its concomitant misery furnishes a fertile ground for the growth of social unrest and war. It is among the aims of the WMA to raise the standard and effectiveness of medical practice the world over in order to promote the health of all people and thus help to secure world peace.

George C. Ruhland, M.D.

CLINICAL NOTE

AN AID TO INTRASPINAL LOCALIZATION

Herbert H. Schoenfeld, M.D., F.A.C.S.

Attending Surgeon, Garfield Memorial Hospital, Washington

Errors in localization of the vertebrae are occasionally made at the time of operation for ruptured intervertebral disc. These errors can easily be avoided by a simple procedure requiring only the coöperation of the roentgenologist. The use of lumbar puncture and injection of radiopaque material is common for localization of intraspinal lesions. The needle is frequently left in situ during fluoroscopy and radiography, and it is visualized by the fluoroscopist and seen on the X-ray films. The site of puncture should be routinely recorded, since the wound in the skin remains visible for several weeks. The puncture wound scar is more easily used to localize the spinous processes than the crest of the ilium or the rib margins, particularly in stout or muscular individuals. This routine recording has been established in the X-ray Department of the Garfield Memorial Hospital and has been found helpful as a practical method of avoiding error.

HEALTH DEPARTMENT PLAN FOR DISTRIBUTING GAMMA GLOBULIN

Field tests conducted during the past 2 years determined the effectiveness of gamma globulin in preventing or minimizing the paralytic manifestations of poliomyelitis. As a result, this blood derivative will be in great demand in poliomyelitis epidemic areas this year. The supply is limited both by the availability of blood and the capacity of the fractionization plants. The Office of Defense Mobilization was designated several months ago as the agency to allocate the globulin through the official health director. The globulin for the central distribution pool for civilian purposes is being furnished without charge by the American Red Cross and the National Foundation for Infantile Paralysis, who are paying for the preparation of the material as well as purchasing the available commercial supplies for inclusion in the allocation plan. It is being distributed by the Department of Defense. A panel of medical authorities was appointed by the National Research Council to decide the basis of distribution and to develop criteria for the use of the globulin. This panel has completed its plans and made them known through the State and Territorial Health Officers Association. The plan is subject to amendments and changes as experiences and latter advice will indicate, though in general all official health departments must conform to the recommended criteria. The main provision of the national plan and its application to the District of Columbia is as follows:

1. Poliomyelitis immune gamma globulin will be packaged in 2 c.c. vials. It is to be remembered that the poliomyelitis globulin has been tested for neutralizing antibodies and, therefore, is distinguished from gamma globulin that is to be used in measles and infectious hepatitis.

2. The allotment is made to states, territories, and the District of Columbia based on the average number of reported cases through the 5-year period, 1947 to 1951. This amounts to 6,180 c.c. for the District of Columbia. At appropriate intervals after the basic allotment is shipped, additional allocations of 60 c.c. will be made for each reported case in excess of the 5-year average for that time of year. About July 1 and at bi-weekly intervals thereafter until October 1 further supplemental allocations will be made in proportion to the number of cases being reported by each state. Fifty-seven per cent of the total supply of gamma globulin available for the prophylaxis of poliomyelitis will be distributed in this predetermined fashion. The medical profession has been requested to report current experiences in terms of paralytic and nonparalytic cases, however, because it may seem necessary to make adjustment in relation to the proportion of paralytic cases reported.

3. A reserve of 33 per cent of the total supply of gamma globulin available for the prophylaxis of poliomyelitis will be retained by the national allocating authority for mass community prophylaxis, and another 10 per cent for unusual situations requiring emergency distribution and for special situations.

4. Criteria for use in poliomyelitis prophylaxis:

a. Gamma globulin is being made available for prophylactic use only, since there is no evidence that it is of value after the appearance of symptoms.

b. *Household contacts of cases clinically diagnosed by spinal fluid examination and/or paralysis*, according to the evidence, may receive effective prophylaxis or modification in many instances. It is recommended, therefore, that the globulin be administered to contacts of clinically diagnosed cases as follows:

(1) Household contacts under 30 years of age
(2) Pregnant women of any age

For maximum benefits, gamma globulin should be administered to contacts as early as possible after diagnosis has been established by spinal fluid examination and/or paralysis.

5. If during this season the epidemic reaches more than the expected number of cases, reallocation will be planned and the medical profession will be properly notified.

District Distribution Plan

The plan of distribution and recommendation agreed upon by representatives of the medical societies of the District of Columbia and the District of Columbia Department of Health are as follows:

1. There will be three centers of distribution in the city of Washington: the Dispensary at Children's Hospital, 13th and V Streets, N.W.; the Admitting Office at Gallinger Municipal Hospital, 19th and C Streets, S.E. These distribution points are always open. The third distribution point will be the Vital Statistics Division, Room 1025 at the Municipal Center Building, 300 Indiana Avenue,

N.W. This office is open Monday through Fridays from 8:15 a.m. to 6 p.m., and on Saturdays and Sundays from 9 a.m. to 5 p.m.

2. Physicians requiring gamma globulin for prophylaxis will be asked to give information so that an accurate record may be kept on all material distributed, in order that it may be replaced. It may be issued at the request of the physician upon presentation of the physician's prescription at any of the three distribution centers, *providing the prescription states the amount of globulin needed, the name, address, and weight of the exposed individual for whom it is to be used, and also the name, age and date of onset of the patient who exposed the individual.*

3. Broader uses of poliomyelitis immune globulin.—If poliomyelitis becomes highly prevalent in a community, physicians may be authorized to give poliomyelitis immune globulin to persons other than household contacts. This authorization, however, must come from the Director of Health based upon the investigation of the Bureau of Preventable Disease. In such an instance additional plans will be made for distribution of the gamma globulin.

4. The recommended dosage for the prophylaxis of poliomyelitis is 0.14 c.c. per body pound of weight. In general it may be estimated that patients 6 months through 2 years require approximately 3 c.c., 3 years through 15 years approximately 1 c.c. per year, adults and pregnant women about 20 c.c., or it may be estimated as shown in the following table:

Age	*Amount*
Under 6 months	2.0 c.c.
6 mo. through 2 years	3.0 c.c.
3 years through 15 years	1.0 c.c. per year
Pregnant women	20.0 c.c.

The amount issued will be made to the nearest 10 c.c. Conformity with the recommended criteria for its use is requested in order that an equitable distribution of the District's supply may be maintained.

Records and Inventory Reporting.—To assure equitable distribution it will be necessary for the distribution center to keep systematic records of the supplies of gamma globulin on hand, amount received, and amount released. Physicians are expected to report diagnosed cases of poliomyelitis to the Health Department within 24 hours.

Physicians are reminded and should emphasize to the contacts of their patients that there is no absolute proof that gamma globulin will prevent paralytic poliomyelitis in all cases, and that the protection afforded by the gamma globulin continues only for 4 to 5 weeks. Such things as adequate sanitation, personal hygiene, and sufficient rest must continue to be emphasized. We all look forward to a better and surer method of poliomyelitis prevention in the near future, as research workers have given hope that an adequate vaccine will be perfected. However, until this is a scientific fact, gamma globulin is our most effective weapon.

COÖPERATION WITH MORTICIANS

The District of Columbia Health Department has been requested by representatives of the undertaking profession that it bring to the attention of the Medical Society a situation which has plagued them for years, and which might possibly be alleviated by virtue of the Society's influence upon its members. It concerns the practice of certain physicians to complete death certificates at their own convenience, with little regard for the undertaker's obligations and responsibilities.

As we know, the law requires that death certificates be filed with the Health Department within 48 hours after death. It also makes it necessary that before human remains may be removed from the place of death, a permit therefor be obtained. Such permit, however, can only be secured upon presentation of the completed death certificate. It follows, therefore, that unless the attending physician fulfills his legal obligation of completing the death certificate as soon as possible after death, and leaves it where it will be conveniently accessible to the undertaker, undue inconvenience and loss of valuable time are bound to ensue, not only for the undertaker but for the decedent's family as well.

We are cognizant of the fact that physicians are, generally speaking, rather busy individuals, yet it would appear that the demand upon their time is not quite so great as to prevent a good many of them from displaying a better spirit of coöperation toward the undertaker.

We shall feel very grateful if the Society brings this matter before its membership, with the view of influencing the responsible physicians to discontinue the censurable practice cited above.

Daniel L. Seckinger, M.D., Dr. P.H.
Director of Public Health for the
District of Columbia

PROCEEDINGS OF THE ANNUAL BUSINESS MEETING

Dr. Wallace M. Yater, President of the Medical Society of the District of Columbia, presided at the Annual Business Meeting of the Society, May 6. The Society voted to accept without reading the "Annual Reports of Officers, the Executive Board and the Board of Censors for 1952–1953" which had been mailed previously to the membership. Dr. John Minor, Chairman of the Executive Board, presented the Supplementary Report of the Executive Board, which was approved. (See report following Proceedings.)

A Supplementary Report of the Committee on Medical Ethics and Deportment, read by a member of the Committee, Dr. Frank E. Gantz, brought members up to date on the malpractice situation. The report is also published in this issue of the Annals.

President's Report on D. C. Survey

Following the reading of these reports, President Yater relinquished the chair to Dr. Herbert P. Ramsey, President-elect of the Society. Upon request Dr. Yater was granted permission by the Chairman to present his report on "Washington's Health Needs—What the Medical Society Should Do about Them." Dr. Yater's report related to the District of Columbia Survey of Medical Care for the Indigent and Related Services, recently completed after months of study. He himself was a member of the Executive Committee of the Survey and Chairman of the Technical Committee on General Medical Care. Dr. Yater introduced his subject as follows:

"On the whole, Washington people should have no complaint about their medical care. There are plenty of doctors and good ones, too. There are good hospitals. There are Blue Shield and Blue Cross plans. Our three medical schools are among the best. We have fine Government hospitals and research institutions. Washington has truly become a medical center.

"Many of us, however, become so engrossed in our own practices that we give little thought to what goes on outside. And yet we should, not only because physicians should take the lead in medical matters, but because it is our civic duty. We not only give freely of our services in our dispensaries and municipal institutions, but we pay taxes to keep them going. Consequently we should be very much interested in the survey, recently completed, of the medical care of the indigent.

"This survey has involved over a hundred citizens in various walks of life, medical and otherwise, and has been aided by the generous loan by the U. S. Public Health Service of 15 professional medical surveyors. Certainly this was the most complete survey of the kind ever conducted, and it can truly be said to have been a community undertaking. Hence, it behooves us to study the report and, if we agree, to endorse it as soon as possible.

"A number of members of the Society have participated actively on the various committees. The Executive Committee of the Survey will continue in existence to aid in the implementation of the 165 recommendations of the report. All organizations concerned will be asked to study the report, and it is hoped they will endorse it. It is important that they do so, because in union there is strength. We of the Executive Committee would like to go before the Commissioners of the District and the District Committees of the Senate and House of Representatives with the backing of many organizations.

"We cannot expect you to endorse 165 recommendations, the justification of which you have not had the opportunity to study. Consequently from month to month we shall publish in the Medical Annals of the District of Columbia sections of the summary of the report in order that at a later date we may come back to you for endorsement of the entire report.

"Some of the recommendations are so vital and urgent, however, that tonight, with the consent of your Executive Board, I shall discuss four of them and call for a vote of endorsement. You have received some notes about these 4 matters tonight, but since you have not had sufficient time to study them, I am asking your indulgence to let me explain them to you."

The substance of the remainder of Dr. Yater's speech is published in this issue of the Annals under the title, "Mile Posts to Health." At the conclusion of his talk the following recommendations were approved by the Society:

1. That the Director of Public Health and the voluntary hospitals make a sincere effort to collaborate in the care of the medically indigent and

that in so far as possible all of the medical needs of indigent patients be met in voluntary hospitals.

2. That the Health Section of the United Community Services be accepted as the community planning agency for medical care in the District of Columbia providing this body be reorganized along the lines set forth in the Survey Report.

3. That a Board of Health be established by law and that the functions of the Board shall be policy-making, promulgation of rules and regulations, holding of hearings, issuing of licenses and permits, approval of plans, programs, budgets and reports, and appointment of the Director of Public Health.

4. That the present administrative pattern of the Health Department be reorganized to provide better integration of medical service. The principal of the pyramidal pattern is recommended in this reorganization in which not more than five department chiefs report directly to the Director of Public Health.

MEMENTO TO RETIRING PRESIDENT

Dr. Minor, Chairman of the Executive Board, presented Dr. Yater with a gavel inscribed with his name and the term of his presidency, a gift of the Society to the retiring President. Dr. Minor made the presentation with these words:

"It is a special pleasure to have the opportunity of presenting this memorial gavel to a friend to whom a memorial seems to come far too early, being as he is in the full vigor of a most active career. However, he was always achieving more than people might have expected from him, and is only following his pattern of being ahead of the game in coming thus early to receive this remembrance of service well done.

"Wallace Yater has been a teacher, a student, a research worker, an editor, and a practitioner—has distinguished himself in all these fields—has contributed to the scientific and sociologic progress of his chosen profession—is presently actively, vigorously engaged in each of these enterprises. He has served the Medical Society of the District of Columbia faithfully, earnestly, progressively; has for a long period directed and edited the journal of the Society. Few men, in my rather long knowledge of the Society, have been more active or effective in its councils.

"This gavel, a symbol of authority, is well earned. I commend him to your admiration and applause."

ANNUAL REPORT OF THE CHAIRMAN OF THE EXECUTIVE BOARD

In presenting his report Chairman Minor stated it was as brief as the subjects dealt with permitted. Routine business was not mentioned but he gave what he called a "boiled-down" account of the Executive Board's stewardship during the past year. Some of the more important actions taken by the Board concerned: the establishment of a Joint Board of Physical Evaluation with the Public Health Service, which would be called upon to make a physical evaluation where an individual claims that appearance in court would seriously jeopardize his health; polling the membership of the Society for their wishes on the resolution, "that no qualified physician applying for membership in the Society shall be denied membership because of race, creed or color"; endorsement of the group health and accident policy underwritten by the Mutual Benefit Health and Accident Association of Omaha; complaints against Associate members who are Active members of the Prince Georges County Medical Society; conference for doctors' secretaries and office staffs; composite photograph of the membership by Harris & Ewing; and the proposed study of the adequacy of physicians' services in the District of Columbia, to be made in coöperation with the U. S. Public Health Service.

The Chairman presented to the Society for permanent membership 49 Active, 35 Associate, 1 Affiliate, and 2 Resident-Intern members who had been elected for a probationary period of one year. These were accepted into the Society's membership.

He reported with regret the passing of 27 members of the Society during the past year. They were: Drs. Charles L. G. Anderson, Robert S. Beale, J. Rozier Biggs, Gaius M. Brumbaugh, E. Warren Burch, Daniel P. Bush, Ben D. Chinn, Cyrus R. Creveling, Henry J. Crosson, Frederick Y. Donn, John C. Eckhardt, A. Frances Foye, Luther A. Gilliom, Charles A. Goettling, Merritte W. Ireland, Harry S. Lewis, J. Ward Mankin, Jesse T. Mann, Walter H. Merrill, George G. Morris, William R. Moulden, James R. Nevitt, Leroy L. Sawyer, Norman P. Scala, Howard L. Smith, Joseph S. Wall, and Olin West.

In closing, the Chairman wished his successor and other officers of the Society every success and expressed his appreciation "to all who have assisted me and other officers in their labors."

Report of the Secretary

In presenting his report the Secretary stated he was touching only on the highlights of his year, which had been an extremely busy one.

STATE OF THE SOCIETY

The membership figures disclose a steady growth in the Society's membership, as the following comparative figures as of May 1 for the past 10 years show:

	1943	*1948*	*1953*
Active	893	1,197	1,338
Life	59	82	72
Associate	207	257	411
Honorary	8	15	19
Affiliate	—	—	12
Resident-Intern	—	—	11
Total	1,167	1,551	1,863

Nine membership luncheons were held during the organization year; these were attended by 157 members. The primary purpose of the luncheons is to create a closer relationship between members and Society officials and to enlighten members in regard to the Society's history, its activities and its finances. Because of the favorable comment received, it was decided to continue the luncheons during 1953.

The financial report was presented at the March business meeting of the Society and copies of the report are available at the Society's Executive Offices to any members who may be interested in seeing them. The Executive Board considered the financial condition of the Society satisfactory. Its budget for 1953 indicates that the income for the ensuing year should be adequate to cover operating expenses.

ACTIVITIES OF THE SOCIETY

During the past year the scientific program has been limited to the ANNUAL SCIENTIFIC ASSEMBLY and the MIDWINTER SEMINAR. The Secretary reported that both were unusually successful. Any skepticism about the future of the SEMINAR was dispelled by the interest shown in the 1953 meeting.

Attendance at the 23rd ANNUAL SCIENTIFIC ASSEMBLY surpassed that of the previous ASSEMBLY by more than 100. Of the total registration of 3,420 last fall, one half were physicians; there was a large attendance of medical students and nurses. The 1952 ASSEMBLY was one of the most satisfying that has been held, especially with respect to the scientific program and exhibits.

The Secretary stated that he had heard nothing but high praise for the SECOND MIDWINTER SEMINAR, which was held in the Medical Society's building, March 17, 18 and 19. It was an all-Washington program under the sponsorship of the Program Committee, headed by Dr. Darrell C. Crain. Attendance was gratifying, the average for the three sessions having been between 180 and 200.

Two changes in the personnel of the Editorial Board of the MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA were reported by the Secretary: Dr. Frederic G. Burke, succeeding Dr. Joseph S. Wall, deceased, and Dr. Thomas M. Peery, replacing Dr. Roger M. Choisser. The ANNALS staff is now comprised of the following members: Dr. Wallace M. Yater, Editor; Theodore Wiprud, Managing Editor; A. Louise Eckburg, Assistant Editor; and Drs. Burke, Peery, Frank D. Costenbader, Hugh H. Hussey, Winfred Overholser, Herbert P. Ramsey, R. Lee Spire, Donald Stubbs, and Charles Stanley White, members of the Editorial Board.

There was a modest increase in paid circulation of the ANNALS in 1952. There was also an increase of $2,700 in advertising revenue as of December 31, 1952 over the previous year.

Demands made upon the MEDICAL BUREAU increased during the year to a point where expansion is imperative. The Medical Bureau Committee voted to recommend to the Executive Board that the BUREAU's quarters be enlarged and additional equipment installed. The Board concurred and authorized the required expenditure, estimated at about $5,000. Architects have drawn preliminary plans for remodeling the first floor of the building at 1710 M Street, and switchboard equipment has been ordered from the telephone company.

On March 1, 1953, the BUREAU had 745 physician-subscribers, 401 to Alternate Listing Service and 332 to Telephone Secretarial Service, a total increase of 23 subscribers since March 1, 1952.

In commenting on Medical Service of the District of Columbia, the Secretary, who is also Secretary of that organization, pointed to the phenomenal progress it has made in the 5 years of its existence. The number of persons covered by the plan in the

Washington Metropolitan Area at the close of 1952 stood at 370,000. From 751 doctors who were participating in the plan on April 1, 1948, there were 1,573 in 1952. Operating expenses had been reduced from a high of 14.5 per cent of subscription income to 9.5 per cent for 1952.

The Secretary praised the loyal and hard-working group which is responsible for the conduct of the Society's prepayment plan and for its full-time administrative staff, especially Mr. F. P. Rawlings, Director of Group Hospitalization, Inc. and Medical Service, and Mr. George B. McGovern, Manager of Medical Service.

On March 1, 1953, a total of 2,352 physicians and their dependents were covered by Group Hospitalization as compared to 3,432 physicians and dependents on March 1, 1952. The Secretary explained this loss by the fact that Associate members who were subscribers had to be dropped because of a GHI ruling which granted participation to Active members only. Approximately two thirds of the Society's Active membership participate in the doctors' group.

The Question Hour for residents and interns was given a "trial run" at Gallinger Municipal Hospital on April 9. The subjects dealt with included legal problems, medical economics, organized medicine, licensing, etc. Some 80 interns and residents attended the initial presentation at Gallinger. At the time of writing this report, the program was scheduled to be repeated in the Medical Society's building on May 13.

The success of "Patients Are People—A Symposium for Doctors' Office Staffs" was indicated by the wide publicity it received both before and after it took place. Five hundred and thirty-two persons registered for the Symposium and several had to be turned down for lack of seating space.

The Secretary of the Society was moderator for both the Question Hour at Gallinger Hospital and for the Symposium for Doctors' Office Staffs.

The Secretary devoted a great deal of his time to meetings of the Committee on Medical Ethics and Deportment, which was charged with the responsibility of obtaining group liability insurance following discontinuance of the Society's group coverage by United States Fidelity and Guaranty Company as of May 1, 1953. The Committee was not successful but voted to recommend to the Society at its March business meeting that it continue its relationship with USF&G even though the company would write coverage on an individual basis only.

ACTIVITIES OF THE SECRETARY

In 1952–53 the Secretary's official connections with civic, professional and governmental organizations were: Associate Medical Advisor to the Director of Selective Service of the District of Columbia; member, American Bar Association's Special Committee for Improving the Administration of Justice; member, Executive Committee of the District of Columbia Survey of Medical Care of the Indigent and Related Services; member, Advisory Committee of the Committee to Study Nursing Needs and Resources in the District of Columbia; member, Health Section of United Community Services as well as its Hospitalization Committee; and member, Board of Trade's Committee on Public Health.

The Secretary resigned his position as Co-chairman of the Medical Advisory Committee to Civil Defense in the District of Columbia because of Congressional apathy toward civil defense.

He addressed the following organizations on the dates and on the subjects listed: Society of X-ray Technicians, May 10, 1952, "The Professional Organization"; Colorado State Medical Society, September 10, 11 and 12, 1952, "Efficiency in the Doctor's Office" and "Doctor's Investments"; Cincinnati Academy of Medicine, September 16, 1952, "What Price Good Will?"; and Prince Georges County (Maryland) Medical Society, October 7, 1952, "What Price Good Will?" He presided at the Dr. Arthur C. Christie Dinner at the Shoreham Hotel, December 20, 1952.

The Secretary closed his report with an expression of appreciation to officers and members of the Society for the encouragement and coöperation given him, and to the staff in the Society's Executive Offices for their assistance.

Election of Officers

The President presented to the Society for election the nominees for office which had been presented by the Nominating Committee to the Society at its business meeting, March 4. Unanimously elected to office were:

President-elect: Preston A. McLendon
First Vice President: Zigmond M. Lebensohn
Second Vice President: Alma Jane Speer
Member of Executive Board: Wallace M. Yater
Member of Board of Censors: Ralph M. Caulk
Delegate to American Medical Association: Hugh H. Hussey
Alternate Delegate to AMA: Frederick C. Fishback

Dr. Herbert P. Ramsey will take office as President of the Society on July 1, 1953; Dr. McLendon, on July 1, 1954. With the exception of the delegates to the AMA, all officers of the Society begin their duties on July 1. Dr. Yater will serve for four years on the Executive Board and Dr. Caulk for three years on the Board of Censors. Dr. Hussey and Dr. Fishback were elected for a two-year period beginning January 1, 1954.

Following the election of officers, President-elect McLendon was called upon to say a few words. Dr. Ramsey escorted the new President-elect to the platform and Dr. McLendon addressed the members of the Society as follows:

"It would be very easy for me to simply say 'Thank you' for the honor you have given me, but it hardly expresses the more sincere feeling which I have for your confidence. I cannot help having considerable trepidation in trying to fill the position held by so many honored members of this Society. It would be very brash on my part to think that I might qualify on a par with such as Davidson, Macatee, Wilson, Lyons, Minor, Costenbader and many others—and especially am I humble in face of the record of my pediatric colleague, Dr. Joseph Wall. But there is help for such as I who feel very much confused in facing some of the problems for solution mentioned by Dr. Yater a few moments ago. Dr. Yater has done a most notable piece of work in sparking the recent survey of medical resources for the District of Columbia. He has given us a right-of-way to be cleared in order to make it travel-safe—safe for the unfortunate ill. No one person can do this job alone. It takes a multi-disciplined clinic, having the assets of chemotherapy, the broad spectrum antibiotics, and perhaps ACTH and cortisone. I shall need them all. Fortunately, they are available in the persons of your executive board, the various efficient standing committees, our enthusiastic membership, and that unexpendable catalyst, the Executive Secretary. Any one of us should be able to function as toastmaster with this array on his program.

"This Society exists because it has three very fundamental functions to perform. They are:

1. The continuing education and protection of its membership.

2. To assist in the education of physicians to succeed us.

3. Continuing to further the health and welfare of the citizens of this community.

"These are broad objectives—they have no limits. Members of the Society, individually and in committee groups, can only add their bit—but each item can be one of progress. I am reminded of a quotation from the work of J. Henri Fabre: 'If we had to wait until we knew every detail of the question studied, no one would venture to write the little that he knows. From time to time a few truths are revealed, tiny pieces of the vast mosaic of things. Better to divulge the discovery, however humble it be. Others will come who, also gathering a few fragments, will assemble the whole into a picture ever growing larger but ever notched by the unknown.' And I might add from 'The Penalty of Leadership' this thought: 'That which deserves to live—lives.'

"Members of the Society, I do appreciate your confidence and I do know that the Secretary and I will have your loyal support."

President Yater called on Dr. Ramsey to make a few remarks before the meeting adjourned and Dr. Ramsey responded as follows:

"Mr. Chairman and members of the Society:

"I would like to make note that you, Mr. Chairman, are still President of the Medical Society and will be until July 1 next. During that same time I shall continue to be President-elect of the Society and Dr. McLendon, who has just been elected, will be President-elect-elect until the first of July. However, I should like to make note at this time that the excellent work in which Dr. Yater has been participating is a work that is very much needed and the implications of it will be continued during my term in office as president. It is our plan during this year to emphasize public health, and within the field of public health we expect to emphasize strongly the field of school health.

"We recognize the fact that the medical profession has a responsibility in respect to public health, both to know about it and also to be active in its provision. To that end we shall do our level best during the coming year to make every physician in Washington exceedingly well informed about what we have, and what we should have, and what is to be our position in this field. The emphasis that we are to place on public health we have already announced in several places, so you may expect to hear in the future more and more about the public health of this city and the place of the physician in the scheme of things."

Report of the Board of Censors

The Chairman of the Board of Censors reported that the increase in membership over the past year, though modest enough, had placed the membership figure at an all-time high of 1,868 members.

Since May 1, 1952, the Board had interviewed 116 applicants for membership. It recommended election of most of these applicants; a few were held for further investigation.

One physician was recommended by the Board for Honorary membership: Dr. Melvin A. Casberg, Chairman of the Armed Forces Medical Policy Council of the Office of the Secretary of Defense.

The procedure followed by the Board for a long time, that of interviewing applicants personally, was continued during the past year. As pointed out by previous Boards, there is no substitute for seeing and talking to applicants. Among other steps taken to ascertain an applicant's qualifications are inquiries directed to medical societies to which he has belonged; each World War II physician-veteran must furnish the Board with a photostat of his "discharge."

The Board is cognizant of the importance of its task and is taking the greatest precautions possible to see to it that only the highest type physicians are elected to membership.

SUPPLEMENTARY REPORT OF THE EXECUTIVE BOARD

This report incorporates matters dealt with by the Executive Board subsequent to the completion of the Annual Reports. Fortunately for you, there are few items of sufficient importance to be included, and these, in so far as your Board is aware, are not of a controversial nature.

Major General Howard McC. Snyder Proposed for Honorary Membership: As most of you know, General Snyder is President Eisenhower's personal physician. General Snyder has had a distinguished career as a medical officer. Graduating from Jefferson Medical College in 1905, the Army Medical School in Washington in 1908, the United States Military Academy in 1929, and the Medical Field Service School in 1932, he advanced rapidly in grade from First Lieutenant in the Army Medical Corps in 1908 to Major General in 1943.

General Snyder has had many important assignments, including membership in the Advisory Group to the Chief of Staff of the Army, 1946–48; Senior Medical Officer, Supreme Headquarters, Allied Powers, Europe, 1951; and Physician to the President of the United States, 1953–.

Your Board is happy to propose General Snyder for Honorary membership in our Society. As required by the Constitution and By-laws the Board's proposal will be referred to the Board of Censors, which must give its endorsement.

Adoption of Amendment XXIII to the Society's Constitution and By-laws: This Amendment is self-explanatory; it reads as follows:

AMENDMENT XXIII

Section 1. Articles I and V of Chapter VIII of the Constitution and by-laws are hereby amended by changing the name of the Committee on Public Relations to the Committee on Public Information.

Section 2. Amendment XIX of the Constitution and By-laws is hereby amended by changing the name of the Committee on Medical Ethics and Deportment to the Committee on Professional Liability Insurance.

Your Board recommends the adoption of this Amendment in the belief that the change in names of the Committees on Public Relations and Medical Ethics and Deportment more accurately indicates their functions.

Proposed Voluntary Assessment for American Medical Education Fund: In a letter dated February 17, 1953, Dr. Karl C. Corley, Chairman of the

Society's Committee on Medical Education Fund, urged that consideration be given the raising of funds for the American Medical Education Fund by assessing each Active member. In advocating the assessment Dr. Corley stated "it was made in light of the deep and far-reaching concern this fund should be to all physicians, and certainly to most of those comprising the membership of the Society."

Subsequently in an appearance before the Executive Board Dr. Corley stressed the financial plight of the medical schools and their need for assistance. He pointed out the obligation of those now in practice to the schools they attended, emphasizing the fact that none of them paid the cost of their medical education.

In view of the fact that donors to the Fund can designate the medical school to which they wish their money allocated, Dr. Corley felt that many who might otherwise be unwilling to contribute would do so. Speaking for his Committee, which consists of Drs. Frederic G. Burke, Robert B. Nelson, Jr. and himself, he said they were unanimously in favor of an assessment of Active members.

Tentative amounts were discussed and the Board finally voted to recommend to the Society that a $10.00 voluntary assessment be levied on Active members in 1954 for the American Medical Education Fund.

Your Board favors a mail vote being taken to ascertain the Society's wishes in this matter so that every member will be given an opportunity to express his views by ballot. Unless a large and representative number vote for the assessment it would, in your Board's opinion, be unwise to undertake a campaign for funds. On the other hand, if a substantial majority vote for the assessment more enthusiastic support can be expected.

Change in Status of Hospital Service Agency Sought: Those of you who have been members of the Medical Society since or before the war years should be familiar with the Hospital Service Agency, formerly the Health Security Administration. For the benefit of those who have since become members it would perhaps be well to explain that HSA, as it is commonly known, is not a governmental department but a voluntary agency which came into being largely through the efforts of the Medical Society. Ever since its establishment leaders in the Society have devoted a tremendous amount of time and effort to assure its success. The Society contributed $10,000 toward HSA's establishment.

Forerunners of HSA were the Central Admitting Bureau for Hospitals and the Medical-Dental Service Bureau, organized in 1935. The first organization, as its name implies, screened patients seeking free hospitalization and outpatient care to determine their eligibility; the second aided patients of moderate and low incomes to budget their medical bills.

Later these two organizations were amalgamated and became known as the Health Security Administration. Still later the budgeting plan was dropped and for many years past the HSA has been what its recently acquired name implies, the Hospital Service Agency. It administers funds for the Community Chest for the care of the indigent in voluntary hospitals and wherever possible "recaptures" such monies as patients who have received free care are able to pay later for the services they have received.

Control of the affairs of the Hospital Service Agency has for many years been vested in a board of 15 members from the corporate membership of 84, a third of whom are physicians, a third, hospital representatives, and a third, the contributing public. It is now proposed that HSA become an agency of the United Community Services, thus relinquishing its autonomy as an organization.

Your Board is very well pleased with HSA's present status, and with your approval it will communicate this as the Society's view to the United Community Services, emphasizing that in its present form HSA is more responsive than it otherwise would be to the wishes of those who are most vitally interested. It also proposes that UCS be notified that one of the purposes for which this organization was established was to protect the medical profession against exploitation by individuals not entitled to free medical service and to see to it that those who were entitled to it received it.

District of Columbia Survey for Medical Care of the Indigent and Related Services: It is not the purpose of your Board to enlarge upon this study for the reason that the President is going to do that himself. He will also submit to you what he considers the four most important recommendations of the Survey Committee. The Board wishes you to know that it has approved these recommendations in principle.

Appointments to Health Section of United Community Services: As in the past your Board appointed two members to represent the Society as members of the Health Section of the United Community Services. Appointees this year are Drs. Josephine Renshaw and Wallace M. Yater. The Board is confident that they will represent the Society most adequately.

Conclusion: Unless some emergency arises requiring action by the Society or there is a demand for a special meeting, there will be no further business sessions until the fall.

The 24th ANNUAL SCIENTIFIC ASSEMBLY is scheduled to be held at the Hotel Statler, October 5, 6 and 7, 1953. We hope that you will all plan now to be present during the three-day session. An excellent scientific program is in prospect.

SUPPLEMENTARY REPORT OF THE COMMITTEE ON MEDICAL ETHICS AND DEPORTMENT

Since the Committee's report to the Society on March 4* there have been developments of such a disturbing nature that this supplementary report was decided upon. In its previous report your Committee presented all the facts it then had in its possession in regard to the professional liability insurance situation in the District and submitted recommendations which it believed were in the best interest of all members. These recommendations were unanimously adopted by the Society.

Unfortunately not all of the facts which the Committee should have had had been provided it prior to this report. It will be recalled that at the conclusion of its last report the Committee listed the premium rates which would become effective May 1, 1953. These had been furnished by the A. H. Baker & Company, General Agents for the United States Fidelity and Guaranty Company in Washington, and were presented just as received.

Shortly after the March 4 meeting a call was received at the Society's offices from a physician who stated that a 50 per cent additional premium was being charged physicians in partnerships. Investigation disclosed that this information was correct and that all insurance companies affiliated with the National Bureau of Casualty and Surety Underwriters, which included the majority of large companies, had subscribed to this requirement.

After this discovery a meeting was held with representatives of the USF&G for the purpose of discussing the matter and the future relationship of the Society and the Company. The Society's legal counsel, Mr. Warren E. Magee, was present and when additional premiums for partnerships came under consideration he stated that there were court decisions on record in the District of Columbia to the effect that a partnership as such cannot be sued. It was agreed that Mr. Magee's citations should be submitted to the Company, which was done. However, the Company's attorneys apparently did not agree that the court decisions referred to were conclusive and therefore recommended that the Company charge partners the additional premium decided upon.

Discussions were then held with representatives of other insurance companies to ascertain what their views were in the matter. Among these were agents for the Lumbermen's Mutual Insurance Company. This Company, it was learned, charges the same premiums as the USF&G, but no additional premium to physicians in partnerships. However, this Company is selective in writing "malpractice" insurance. For example, it does not insure dermatologists, radiologists, plastic surgeons, psychiatrists or physicians with pending risks or recent claims. Obviously, this ruled out any further discussions, because the Society could not associate itself officially with a company which would not sell coverage to a large number of its members.

Upon learning that the Lumbermen's Mutual Insurance Company would not require physicians associated in a partnership to pay an additional premium, a communication, dated April 23, 1953, was directed to A. H. Baker & Company, requesting it to advise the USF&G's final decision in regard to the controversial charge. Attention was called to the numerous protests registered by Society members and that the Executive Board would consider them at a meeting on April 27.

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* See April issue of MEDICAL ANNALS, pp. 206–8.

The Baker Company promptly replied that they had discussed the matter with the National Bureau of Casualty and Surety Underwriters, which replied as follows:

"At law each partner, in addition to being responsible individually for his own personal acts, is responsible for the conduct of all partners. An injured person, therefore, may elect to sue the partnership, one or more of its partners, or even single out a partner who had no personal participation in the occurrence. It is evident then that participation in a partnership introduces a liability for each member beyond that which a doctor has in his individual practice.

"The rule of law which makes one partner responsible for the acts of another partner and partnership indicates the need for an additional premium charge to recognize the additional exposure.

"In return for this additional premium, however, the policy gives another set of limits. Thus, assuming four physicians are insured in the same company for individual and partnership liability, five sets of limits could apply in an individual case instead of four which would apply if the partnership liability were not separately considered.

"The fact that the Bureau has specified an additional charge of 50 per cent is purely academic as we do not actually believe that they have any experience figures which would indicate whether the additional charge should be 5 per cent or 95 per cent. The 50 per cent figure apparently is more or less a compromise one which will be reflected in future experience for the determination of whether such a percentage figure should be increased or reduced to a more sensible charge. Until such time, however, as there has been some experience figures to determine the accuracy or fallacy of this figure, we do not believe there is anything that can be done to bring about a change in the rule in the near future."

There followed assurance that experience in the next year would undoubtedly justify a drastic reduction in the additional premium and that the Company would undoubtedly recommend such a reduction as soon as it was warranted.

That this turn of events was disappointing to your Committee is putting it mildly. It still has not received a satisfactory explanation why it was not informed of the "extra" charge to members engaged in partnerships at the time it was supplied the new premium rates. It believes this omission was inexcusable and has placed an unwarranted financial burden on partnerships.

Because there was so little time left before the expiration of its group policy in which to make any change in its recommendations of March 4, the Committee concluded that its action at that time must stand. In other words, that the coöperative arrangement with the United States Fidelity and Guaranty Company be continued during the ensuing year.

Your Committee will not be surprised if some members seek coverage where they can obtain it at the most satisfactory rate. It would urge them, however, to read their policies carefully and be certain of the adequacy of the coverage and, what is equally important, inquire what legal firm will represent them in event of suit. The attorneys who have represented the USF&G policyholders are without doubt most experienced and able in handling malpractice litigation.

In conclusion your Committee would point out again that far too many malpractice suits stem from the fact that doctors are not exercising the care they should in discussing the service rendered patients by other physicians. As has been previously reported to you, 25 per cent or more of the malpractice suits originate in careless or thoughtless comments by physicians. This is a fact which must somehow be brought home to our members if the sought-for improvement in the malpractice situation in the District is to be realized.

Your Committee sincerely hopes it will have a much more favorable report some months hence.

Respectfully submitted,
James A. Dusbabek, M.D., *Chairman*
Frank S. Bacon, M.D.
Morris Chase, M.D.
John V. Dolan, M.D.
Charles E. Fierst, M.D.
John F. Finnegan, M.D.
Frank E. Gantz, M.D.
Ernest A. Gould, M.D.
Don Johnson, M.D.

(*Continued on page 338*)

MILE POSTS TO HEALTH

The District of Columbia Survey of Medical Care for the Indigent and Related Services*

The problem of adequacy of medical care furnished to the indigent in the District of Columbia has been of considerable concern to many people and organizations as well as of paramount concern to the District of Columbia Health Department. The House Subcommittee on District of Columbia Appropriations for the fiscal year 1951 expressed its concern in its report on that Bill. Soon thereafter the problem was presented by the Health Commissioner to the Advisory Committee to the Director of Public Health on Medical Care to the Indigent in the District of Columbia.

This Advisory Committee consists of representatives from Region III of the U. S. Public Health Service, District of Columbia Medical Society, American Association of Medical Social Workers, United Community Services, District of Columbia Tuberculosis Association, District of Columbia Cancer Society, Medico-Chirurgical Society, Washington Board of Trade, District of Columbia Board of Public Welfare, as well as representatives from some of the local hospitals and other organizations.

After several meetings, the Advisory Committee decided to arrange for a Survey of Medical Care for the Indigent and Related Services, and to request technical assistance from Region III of the Public Health Service. District Commissioner Donohue formally requested the assistance of the Surgeon General of the Public Health Service, and upon receiving a favorable answer the Advisory Committee proceeded to organize for the Survey.

The Advisory Committee believed that a Survey to succeed must encompass at least three essential factors:

1. The community must wholeheartedly desire and endorse the Survey.

2. The findings and recommendations of the Survey must be those of the community itself.

3. Measures must be set up to effectuate the findings and recommendations. To accomplish this they set up an organizational pattern as follows:

The Health Advisory Committee as a nucleus was expanded to approximately 80 members and became the General Survey Committee. Mr. William Leahy, President of the District of Columbia Tuberculosis Association and Chairman of the Selective Service for the District of Columbia, was requested to accept the chairmanship of the General Survey Committee. Upon his acceptance the Health Advisory Committee was expanded. Appointees were selected for their qualifications as representative citizens of the community interested in the problem and capable of effectuating the Survey. The most important facets of the community are represented on this General Survey Committee. To facilitate administration an Executive Committee of the General Survey Committee was appointed. Technical Committees were appointed to encompass all facets of the Survey. The surveyor or field worker for the Technical Committee brought to the Technical Committee the facts and findings which it decided it needed. The Technical Committee was responsible for the final recommendations and presented such recommendations to the Executive Committee for approval prior to submission to the General Committee.

The objective of the Survey was a complete study of all facets of medical care for indigents in the District of Columbia. Medical care for the indigents is almost a complete cross-section of medical care programs of the community. Hence, a survey of medical care for the indigent must encompass more than that provided by the official health and welfare agencies, and should include the care furnished by private and voluntary agencies. As each has its impinging factor, all should be weighed in the analysis of indigent medical care in its entirety.

The Survey endeavored to reach conclusions, not resting solely on opinion but verifiable by facts, and hoped to find the problem susceptible of scientific analysis. To accomplish these objectives a staff of field workers was organized in the following facets:

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* Abbreviated portions of the report of the Survey will appear in the MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA from month to month. The General Survey Committee, William E. Leahy, Chairman, included representatives of all organizations in the District of Columbia concerned with the medical, physical and social problems of the indigent. Many members of the Medical Society of the District of Columbia served on this committee and on the various Technical Committees. The Survey was under the direction of Dr. E. T. Thompson of the Public Health Service. Dr. Wallace M. Yater was Chairman of the Technical Committee on General Medical Care.

1. Mental Care for the Medically Indigent
2. Tuberculosis Services for the Medically Indigent
3. Maternal and Child Welfare Services for the Medically Indigent
4. Nursing Services for the Medically Indigent
5. Venereal Disease and the Medically Indigent
6. Dental Care for the Medically Indigent
7. Medical Care Official and Nonofficial Agencies for the Indigent including Chronic Disease, Rehabilitation, and Home Care for the Medically Indigent
8. Hospitals and Clinics for the Medically Indigent
9. Medical Social Service and the Medically Indigent
10. Biostatistics

Much of the field work was done by the staff of Region III on a part-time basis and in addition to their other duties. Some assistance was furnished from other divisions of the Public Health Service, but a great deal of field work was performed by the members of the Technical Committee. Final reports, in most instances, were written by the Technical Committees. Field work began immediately following the organizational luncheon held at the Willard Hotel at noon, March 12.

Since the field work was done only when convenient and without jeopardy to the usual duties of the field workers, a period of 6 months was devoted to this portion of the Survey. An additional 4 months were required for the Technical Committees to review, analyze and prepare appropriate recommendations. A final month was devoted to review and correlation of the reports of the Technical Committees by the Executive Committee before final presentation to the General Survey Committee.

Five underlying principles have emerged that were considered to be essential in the provision of medical care to the indigent and medically indigent. If these principles are adhered to in future plans, policies, and operations of the Health Department, other District Departments, and other community agencies, a sound, integrated program for medical care of the indigent can be developed. At the same time, the organization and administration of the Health Department must provide the kind of framework within which the community needs can receive adequate consideration.

PRINCIPLES

I. It is essential that medical services for the indigent and the medically indigent be integrated, to provide care of adequate quality and quantity with continuity for the individual.

II. An effective community program for the indigent and the medically indigent requires the coördinated use of both voluntary and public medical and health resources.

III. The provision of medical care for the indigent and the medically indigent through separate and isolated sources is detrimental to the community and to the individual.

IV. Education of medical and allied professional students and graduates is a community responsibility requiring participation by public and voluntary agencies.

V. Referral of indigent individuals for health care prior to illness promotes the maintenance of health through prevention, early diagnosis, treatment, and rehabilitation.

Six major recommendations are being made in accordance with these principles. Ten other recommendations directly affect or relate to the medical care program.

RECOMMENDATIONS

I. The most important finding is that medical services for the indigent are provided to the individual patient with little or no coördination. The following are illustrations of this finding. The patient who has received outpatient care at a voluntary hospital is virtually restricted to Gallinger Municipal Hospital for inpatient care in other than emergency hospitalization. This separation makes for duplication, prevents continuity of care, and works a hardship on the patient. Patients with acute illness in the home may be attended by a District Physician or by an intern on the ambulance. Both of these services tend to operate in isolation from other services provided. At the present time, the home care programs are restricted to patients with chronic illness eligible for care in Gallinger Hospital, or to cancer patients at Georgetown University or George Washington University Hospitals. Drugs are supplied through the outpatient clinics of the coöperating hospitals up to one week's supply; refills of prescriptions are then obtained at the Health Department Pharmacy. Medically indigent patients go directly to the Pharmacy from the hospital clinic; public assistance recipients, however, must have their refill prescriptions certified by the Public Assistance Division of the Board of Public Welfare before presentation at the Pharmacy. The Board of Public Welfare obtains appliances for the public assistance recipients, while the Health Department obtains them for the medically indigent. If the financial status of a family shifts, eligibility for service under one or another plan may be affected. No adequate provision is made for a smooth transition for these patients.

Although medical care is available for persons in need, such fragmentation indicates lack of planning for continuity of service to individual patients.

The quality and quantity of medical care for the needy should not be inferior to that available to others in the community. Adequate medical care of good quality requires continuity of service. Effective and efficient service requires an integrated source, where the same facilities and personnel, in so far as is feasible, are used to provide care.

A coördinated medical care program has special significance for public assistance recipients. They are especially subject to illness and disability. Medical care, as a part of total need, can be planned for at the same time that arrangements are made to meet their needs for food, clothing, and shelter. Referral for health care at the time they are accepted for financial assistance would help in the prevention of illness, and would facilitate early diagnosis, prompt treatment, and rehabilitation. It is recommended that:

> IMMEDIATE STEPS BE TAKEN TO DEVELOP A COÖRDINATED PLAN FOR MEDICAL CARE OF THE INDIGENT AND THE MEDICALLY INDIGENT.

The plan should assure continuity and adequate quality of care to the patient, should share in meeting the needs of the community for education of professional students and graduates, and should make the most effective use of personnel, facilities, and funds.

The plan should be based on a concept of adequate service which embraces prevention, early case finding, treatment and rehabilitation. The individual eligible for service should have available to him service providing ambulatory care, home care for acute and chronic illness, hospitalization, and nonhospital institutional care.

In so far as possible, an individual should be able to obtain all the services at any one of the hospitals participating in the plan. Since the concentration of medical care for the indigent at the municipal hospital symbolizes the undesirable philosophy of separate care for the needy, the number of hospitals participating in the plan should be as large as is possible. Each participating hospital should be prepared to offer a comprehensive service to the individuals accepted for care. In particular, the hospitals must plan to make available sufficient beds to furnish inpatient care when needed by the patients attending the outpatient clinic. Within each of these hospitals the administration should be planned to assure continuity of care by the development of unit record systems, procedures for referral and exchange of information, and a method of adequate follow-up for each individual patient.

Referral of individuals should take into consideration the proximity of residence to the hospital, the preferences of the patient, and the ability of the hospital to furnish care.

Public assistance clients should receive medical care as a part of their total needs. They should be referred for health care, both preventive and therapeutic, at the time of certification for financial assistance.

II. The community should play an active and significant part in the development of the Health Department program and policies. The best way to ensure the responsiveness of the Health Department to the community is through a Board of Health.

Policy-making by a truly representative board has many advantages. Policies which are developed after a full discussion of the viewpoints of those concerned and affected, with consideration of the probable effects of the policy on them, are community policies. In a public health program, where the policies should reflect community thinking and interests, the collective judgment and decisions of a group of persons are likely to be superior to those of a single individual. It is recommended that:

> A BOARD OF HEALTH BE ESTABLISHED BY LAW.

The functions of the Board should be policy-making, promulgation of rules and regulations, holding of hearings, issuing of licenses and permits, approval of plans, programs, budget, and reports, and appointment of the Director of Public Health.

The law which establishes the Board of Health should specify that: (1) The composition of the Board of Health should be 3 physicians, 1 dentist, 1 nurse, and 4 individuals from the public at large; (2) members of the Board of Health shall be appointed by the Commissioners of the District of Columbia; the Commissioners shall make their appointments from among nominations submitted by appropriate local, professional, and civic organizations; and the Commissioners shall specify the organizations which shall submit nominations and the number of nominations to be submitted by each organization (the professional members of the Board would be nominated by the medical, dental, and nursing societies; the public-at-large members of the Board would be nominated by such organizations as the United Community Services, civic associations, the Board of Trade, etc.); (3) the terms of office should be for 3-year overlapping periods—the members to serve for not more than 2 successive terms; (4) meetings of the Board should be held at least 9 times a year.

III. In the Health Department at the present time the provision of, or arrangement for, medical care of the needy is divided among a number of bureaus or administrative units. Illustrative of the dispersion of services is the following: Gallinger Hospital provides inpatient and outpatient service; Glenn Dale Sanatorium provides inpatient care for tuberculous patients. Outpatient care for the tuberculous is furnished by a separate Bureau of Tuberculosis. The Bureau of Venereal Disease operates diagnostic and treatment clinics. The Bureau of Mental Hygiene operates mental hygiene clinics. The alcoholism clinic is operated by the Alcoholic Rehabilitation Unit. The Bureau of Maternal and Child Welfare operates child health and obstetrical clinics. The Bureau of Dental Health conducts dental clinics. The Bureau of Nursing has recently added bedside nursing care to its generalized public health nursing activities.

The Bureau of Medical Assistance provides the District Physician Service, homemaker service, and emergency ambulance service. That Bureau determines eligibility for its own services and for those of other bureaus and of the municipal hospitals. Eligibility is determined and payments are made in behalf of the needy for such services as hospitalization, emergency room and clinic visits. No administrative unit has centralized responsibility for planning a medical care program for the needy.

There is no established administrative pattern within the Health Department to bring the various medical care functions and activities together for consideration as an entity. Each bureau director is directly responsible to the Director of Public Health. With 20 bureaus reporting to one executive, it is apparent that many activities of the bureaus cannot receive due consideration. It is recommended that:

> THE PRESENT ADMINISTRATIVE PATTERN OF THE HEALTH DEPARTMENT BE REORGANIZED TO PROVIDE BETTER INTEGRATION OF MEDICAL SERVICE.

IV. A number of departments in the District Government have some concern with medical care. The Board of Public Welfare, in particular, is responsible for medical care of individuals in its institutions,* payments for hospitalization for mental illness, and some medical services supplemental to those of the Health Department. The Board of Education, the Juvenile Court, and the Department of Correction also are concerned with medical care. Recently a committee has been formed to consider problems common to the Health Department and the Board of Public Welfare. Interdepartmental committees, bringing in other departments, can be an effective means of coördinating related activities.

Furthermore, representation from voluntary as well as official agencies on committees is needed for better coördination of the services of both groups. The development of joint plans, policies, and activities is especially needed between the Health Department and the voluntary hospitals.

Finally, the community itself and the Health Department should be aware of and informed about each other's plans and actions. An opportunity should be provided for them to meet for the mutual discussion of the community's health needs and problems.

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* Industrial Home School and Annex, Industrial Home School for Colored Children, National Training School for Girls, National Training School for Boys, Receiving Home for Children, District Training School, Home for the Aged and Infirm, Municipal Lodging House.

The principle of the pyramidal pattern should be carried out in the reorganization of the Health Department in which not more than 5 department chiefs shall report directly to the Health Commissioner.

Inasmuch as the organizational pattern of the Health Department is not the concern of this committee, action on recommendations on the specific details of organization should be left to the proper organizing groups. It is recommended that:

A. INTERDEPARTMENTAL COMMITTEES BE FORMED TO COÖRDINATE THE ACTIVITIES OF THE VARIOUS DEPARTMENTS OF THE DISTRICT GOVERNMENT CONCERNED WITH MEDICAL CARE.

B. THE MEDICAL CARE ACTIVITIES OF THE OFFICIAL AND VOLUNTARY AGENCIES BE COÖRDINATED THROUGH INTERAGENCY AND COMMUNITY COORDINATING COMMITTEES.

The formation of Interdepartmental Committees should be extended to include representation from all District departments having concern with medical care.

Wherever possible, existing coördinating agencies should be made responsible for bringing official and voluntary agencies together. The Hospital Council should be asked to assume leadership in promoting sound relationships between the voluntary hospitals and the Health Department. The Health Section of the United Community Services, representing the total community, should be made responsible for leadership in developing coördinated programs among the voluntary and public agencies in the health field.* Consideration should be given to any necessary studies or changes in objectives, plan of financing, and staff additions in these two agencies that will permit the effective discharge of these responsibilities.

V. Many questions relating to the past experience of the Health Department in the operation of the program of medical assistance were left unanswered in the Committee study for lack of organized data. The present budget of the Bureau of Medical Assistance does not allow for statistically trained personnel to tabulate and analyze data collected in the operation of the program. The Health Department as a whole lacks personnel to make the special studies which are essential for use in policy determination, planning, and budgeting for medical care. Programs tend to become static without continuing evaluation. Current needs of the community cannot be reflected in the medical care program without studies designed to indicate the kinds of changes that should be made. It is recommended that:

A BIOSTATISTICAL AND RESEARCH UNIT BE ESTABLISHED IN THE HEALTH DEPARTMENT.

Responsibility for the collection, tabulation, and analysis of data on the operation of the medical care program should be placed in this service. In addition, research required to estimate needs for medical care, and to form a sound basis for planning, policy formation, and budgeting should be a major activity of this unit.

The data collected and analyzed should indicate the services provided, classified by financial status, age, sex, and diagnosis; and the volume and cost per individual, per illness, and per assistance recipient. The unit should also provide information which the administrator needs in developing plans to be presented to the Board of Health for approval.

VI. Eligibility for tax-supported medical care is determined by the Bureau of Medical Assistance in accordance with two Orders of the District Commissioners issued in 1946 and 1949. The 1946 Order contains a residence requirement and an income scale with maximum levels in relation to the number of persons in the family; exemptions of certain categories are also included. No adjustments in the income scale have been made to take account of the rising living costs since 1946.

The maximum income and residence requirements are strictly adhered to in determining eligibility, regardless of medical need. Moreover, in determining income, no allowance is made for variations over a sufficiently long period to arrive at a realistic average income. Nor is sufficient consideration given to future income in relation to medical needs, obligations, and resources in determining either eligibility or ability to pay part of the costs. These inequities result from the inflexible administration of the Orders. Yet the Orders do allow for some administrative interpretation and do make some provision for deviations from the prescribed eligibility criteria.

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* See pages 324–5.

Financial assistance is granted to individuals after an eligibility investigation by the Public Assistance Division of the Board of Public Welfare. Recipients of general assistance, whose grants are made exclusively from District funds without Federal sharing, are accepted for medical assistance by the Bureau of Medical Assistance without further investigation. Medical assistance for other public assistance recipients, however, is provided only after reinvestigation by the BMA. It is recommended that:

> THE DETERMINATION OF ELIGIBILITY FOR TAX-SUPPORTED MEDICAL CARE BE BASED ON THE MEDICAL AND SOCIAL NEEDS OF THE PATIENT, IN RELATION TO THE RESOURCES AND FUTURE EARNING CAPACITY OF THE FAMILY.

All persons certified for public assistance should be certified simultaneously for medical services and referred to a hospital for medical examination and continuing care.

Eligibility of those not already receiving public assistance should be determined with consideration of the diagnosis, prognosis, probable cost, and duration of the illness. An important factor for consideration is whether the patient is the wage earner. The future income of the patient and his family should be determined in relation to their obligations and the probable costs of the illness. Medical and economic need should be reviewed at periods of not more than 6 months. In relating cost of care to the individual's resources, emphasis should be placed on conservation of resources to prevent future financial dependency.

A standard budget based on current costs of living should be developed with the advice of social workers, home economists, and other representatives from fields familiar with the technics of constructing such a budget as well as with the costs of living in the District. In so far as possible, a uniform standard budget should be established for the District, scaled to reflect the size and composition of the family. Authority should be given for use of discretion and flexibility in applying the standard budget.

VII. Rates of payment to the voluntary hospitals bear no relation to the cost of service. Because of the low rates they receive, particularly for inpatient care, some of the coöperating hospitals have limited the amount of service to a minimum. Since they lack endowment funds, most of the hospitals are in no position to subsidize care for the indigent. Government agencies should not expect to purchase adequate medical care at rates that ignore the cost, and must be prepared to reimburse at reasonable rates the institutions that furnish services to the needy. It is recommended that:

> THE RATES OF PAYMENT TO THE COÖPERATING HOSPITALS BE RAISED TO A LEVEL MORE CONSISTENT WITH THE COSTS TO THE HOSPITAL, BASED ON UNIFORM COST ACCOUNTING PROCEDURES.

The increases should apply to all the services furnished by the hospitals—hospitalization, clinic visits, emergency ambulance calls, X-ray service, and any other services, such as home care, which may be agreed upon in a plan for medical care of the indigent.

Various methods of reimbursement for services used in other areas should be considered. In reimbursement for hospital stay, a ceiling rate might be based on the current cost per day, averaged for the participating hospitals. Payment to the hospital might then be made at the ceiling or the actual cost, whichever is lower. The rate might be computed to be all-inclusive, or exclusive of extra services such as anesthesia, laboratory procedures, drugs and dressings, which would then be paid for according to a fee schedule. Another method is a decreasing rate, scaled to the length of hospital stay, providing a higher rate for the first few days to reflect the high costs of extra services usually required, and a lower rate thereafter to reflect the decreased medical supervision and nursing care ordinarily needed in that period. Routine authorization for hospital stay might be allowed with designated lengths of stay determined by the medical condition, such as tonsillectomy, 2 days; appendectomy, 5 days; paraplegia or extensive burns, 3 months. Deviations from the routine authorization, allowing longer periods of hospitalization, could be made upon adequate justification by the hospital. Further exploration of alternative methods of payment should be made to arrive at an appropriate pattern for the District.

RECOMMENDATIONS FOR THE DEVELOPMENT OF A MORE EFFECTIVE COMMUNITY HEALTH COUNCIL

Many sections of this report emphasize the need for a strong and effective organization which will bring together representatives of the health professions, the health agencies and the general public in order to plan and develop better coördinated health services. Many health agencies are operating, all too frequently, without proper coördination among them. The programs of some agencies need to be improved in the light of modern standards. Some essential services are lacking in the existing network of agencies. It is the task of a community health council to coördinate and improve existing programs and to plan new services.

Each agency which provides health services is, and should be, autonomous. There is a strong tendency for each agency to plan and to carry out its program independent of other agency programs, even when the services are intimately related. The health council has, and can have, no authority. It can issue no orders or directives. But through the health council people of good will can be brought together to work out their problems and to carry them out willingly.

The essential plan by which a health council seeks to achieve its purpose includes the following elements:

1. The council brings together in a general membership body representatives of every agency operating a health program, representatives of the health professions, and representatives of the general public, who are the consumers of health services.
2. The council's work is carried on by the volunteer participation of lay persons and professional health personnel, with an adequate full-time professional staff serving the council.
3. The major work of the council is carried on through small working committees, each charged with a specific problem. The committees' functions generally include the gathering of facts, the development of proposals, the securing of acceptance of these proposals by the agencies concerned and by the community, and the follow-up of such recommendations until they are effectively carried out.

The Health Section of United Community Services of Washington constitutes the present health council in the District of Columbia. Since its organization in 1948 it has accomplished some worthwhile objectives. It is desirable to take steps necessary to make it the more effective instrument for health planning which this community needs.

Since UCS is both the Community Chest and the Community Planning Council for Washington, there is a strong feeling on the part of those health agencies which raise their funds independently of the Chest campaign that the planning function of UCS is too closely identified with the Chest function. There have been adequate justifications for this belief.

The Health Section, whose membership includes 10 Chest-affiliated and 25 non-Chest-affiliated health agencies in Washington, was asked each year to recommend which health agencies should receive Chest support for the next year. This is not an appropriate function for a sound community health council.

The Health Section has had one professional staff worker and one secretary. This is entirely inadequate in a complex metropolitan community if more effective results are to be achieved.

Three major suggestions are offered to overcome the reluctance of agencies to use the health council:

1. The undertaking of a small number of specific and limited projects and the demonstration, through these efforts, that success in coördinated planning can be achieved without jeopardizing the identity of individual agencies.
2. An effort to interpret to the boards of the agencies and to the public at large the importance of inter-agency planning.
3. All health agencies should share in the financing of the health council. Their monetary stake in the council should encourage them to seek value for their investment.

The following points are made with the aim of overcoming the too-close relationship of the Health Section of UCS with the Community Chest functions of UCS:

1. Recently adopted amendments to the UCS By-laws will establish the Community Chest functions of UCS distinctly separate from its other functions. There is now a Membership Department whose primary responsibility is to determine which agencies shall receive Chest funds, and a Budget

Department to determine the amount of Chest funds to be allocated to these agencies. The Health Section will no longer be required to recommend agencies for inclusion in the Chest. The Section may be asked to make evaluative studies and reports on agency programs, but this is a proper function of a health council, and might apply equally well to Chest and non-Chest agencies.

2. The Health Section should not depend exclusively on Chest funds for its own operation. It should be financed by membership dues from all health agencies, including Chest and non-Chest agencies, and by special grants secured for specific projects from any appropriate source.

3. The council staff should not be concerned with the fund-raising efforts of any of the member agencies.

At least one additional professional staff member for the council is needed to permit the development of a more effective program. This could be accomplished if the council were financed by all member agencies, thus increasing the total funds available to the council.

In addition to the changes in the present Health Section recommended above the participating agencies may wish to suggest other changes in the organization structure of the Section and in its relations to the UCS Executive Committee and Board of Trustees. The UCS By-laws and spirit of operation are sufficiently flexible to permit reasonable changes of this character.

SOUTHERN PEDIATRIC SEMINAR

The Southern Pediatric Seminar will hold its 33rd annual session this summer in Saluda, North Carolina. Two weeks (July 20–August 1) will be devoted to pediatrics and one week (August 3–8) will be devoted to obstetrics.

This is an institution of which doctors in the South have a right to be proud. It was founded by a Southern doctor, it is owned and operated by Southern doctors, and its faculty members consist of outstanding Southern physicians. It has been deemed by many the best postgraduate course in pediatrics and obstetrics available in the country today.

The course consists of lectures, clinics, demonstrations, and clinicopathological conferences. The members of the faculty are equally divided between physicians in teaching positions and physicians in active practice. Ample opportunity is given for discussions in small groups and for the answering of questions. Every effort is made to give the general practitioner the material and information which he needs in his everyday practice.

The course is fully accredited by the American Academy of General Practice.

One great feature of the Seminar is that it is held in the cooling atmosphere of the mountains of North Carolina and many physicians make of the occasion a vacation as well as a time for learning,

(*Continued on page 338*)

CALENDAR OF SPEAKERS

The following members of the Medical Society of the District of Columbia have addressed lay groups during the past several weeks. The Society maintains a Speakers Bureau, sponsored by the Committee on Public Relations, through which requests for speakers for lay groups, including radio programs, can be filled.

Date	*Speaker*	*Subject or Title*	*Organization*
April 9	Dr. Joseph V. Kennedy	Common Skin Diseases	Professional Business Services
April 22	Dr. Benjamin L. Jamison	Discussion of film, "Preface to Life" on Film-forum Series, "You and Your Family"	Calvary Methodist Church
May 3	Dr. James A. Gannon	Tuberculosis	Congregation of Universalist Church
May 5	Dr. Edward J. Stieglitz	The Aging Person	Montgomery County Public Health Lay Council
May 26	Dr. George T. Sharp	Recent Drug Discoveries (past 6 years) and Administration	Staff nurses of D. C. Public Schools

News and Personals

The Seventh Congress of Pediatrics will be held in Brazil, October 4–9, 1953. Physicians wishing to present papers should submit them in triplicate, typewritten, double spaced, to the Secretary before August 31. They may be addressed to Dra. Eunice T. R. Ribeiro, Secretário Geral, Rua de Santo Antonio 120, Belém, Bará, Brasil.

The Education and Training Division, Office of the Surgeon General of the Army, announces that, beginning July 1, the length of time that Army interns will spend in the different hospital sections or services will be changed to comply with the requirements of the Council on Medical Education and Hospitals of the AMA.

Under the new plan, medical interns in Army hospitals will spend 3 months in Internal Medicine, 3 months in Surgery, 2 months in Obstetrics and Gynecology, 2 months in Pediatrics, and 2 months in a service they select on the basis of personal preference. Electives open to the interns are Laboratory Service, Ophthalmology Section, Otolaryngology Section, and the Physical Section, Psychiatry and Neurology, and Radiology Services.

The program currently in effect allows the intern 4 months in Surgery, including Urology and Orthopedics; 4 months in Medical Service, including Pediatrics and Contagious Diseases; 2 months in Obstetrics and Gynecology; 1 month in Psychiatry and Neurology; and 1 month for an elective chosen from among Laboratory Service, Ophthalmology Section, Otolaryngology Section and Physical Medicine.

A total of 150 medical school graduates will intern in Army hospitals during the year 1953–54. Walter Reed Army Hospital is included among the hospitals participating in the intern program.

Approximately $40,000 will be awarded in grants for medical X-ray research at nine universities throughout the world, according to an announcement, May 5, by Mutual Security Director Harold E. Stassen, President of the **James E. Picker Foundation** of New York City. The Picker Foundation, established in 1947 to further and broaden the uses of radiology for the good of mankind, has since 1950 made available funds totaling $80,000 for fellowships in radiology and for grants-in-aid to support radiological research by mature investigators.

Included among the recipients of grants for 1953 is **Dr. William J. Tobin,** who has received a renewal grant for research in progress at Georgetown University School of Medicine where he is Associate Professor of Orthopedic Surgery.

Applications for 1954–55 Picker Foundation Awards should be in the hands of the committee, at 70 Broadway, New York City, not later than November 1, 1953.

The Executive Board of the Medical Society of the District of Columbia held its regular meeting, April 27. Upon the recommendation of Dr. Herbert P. Ramsey, President-elect of the Society, Drs. Wallace M. Yater and Josephine Renshaw were nominated as the Society's representatives to the Health Section of the United Community Services for the coming year. They will succeed Drs. Henry C. Macatee and William Earl Clark.

Dr. Ralph M. Caulk was named Vice Chairman of the Committee on Arrangements for the 24th ANNUAL SCIENTIFIC ASSEMBLY.

The Board approved the proposal of the District Commissioners that Dr. Neil B. Campbell be appointed temporarily to the Board of Police and Fire Surgeons until the completion of the military service of Dr. William D. Claudy.

Several members of the District Medical Society took part in the program of the **American College of Physicians** during its 34th Annual Session in Atlantic City, New Jersey, April 13–17. This meeting was attended by more than 5,000 physicians from all parts of the Nation.

Dr. John Minor, Associate in Medicine, George

Washington University School of Medicine, presented a paper on "Social Factors in Illness" as part of a Symposium on Emotional Factors in Disease.

Dr. Edward D. Freis, Adjunct Professor of Medicine, Georgetown University School of Medicine, took part in a Panel on Newer Therapeutic Agents in the Treatment of Hypertension. Dr. Monroe J. Romansky, Associate Professor of Medicine, George Washington University School of Medicine, was one of the speakers in a Panel on Antibiotics. Dr. Howard T. Karsner, Medical Research Advisor to the Surgeon General of the Navy, assisted in a Clinico-Pathological Conference.

Series of clinics were televised in color daily to 18 receiving booths in Convention Hall by a group of physicians and institutions from various parts of the country. Two of these televised clinics featured District Medical Society members:

April 14: Psychiatric Aspects of the Male Menopause. Captain George N. Raines, MC, USN, Head, Neuropsychiatry Branch, Professional Division, Bureau of Medicine and Surgery, Navy Department; Professor of Psychiatry and Director of the Department, Georgetown University School of Medicine

April 16: Visiting Chief Pro Tem Rounds at the Atlantic City Hospital. Harold J. Jeghers, M.D., Professor of Medicine and Director of the Department, Georgetown University School of Medicine; Physician-in-chief, Georgetown University Hospital.

Mr. V. J. Skutt, President of Mutual of Omaha, presented Dr. Howard A. Rusk, Associate Editor of the *New York Times*, the Mutual of Omaha Dr. C. C. Criss Award at the Annual Dinner of the College at the Chalfonte Hotel, April 16. The Award consists of a $10,000 cash prize, plus a gold medal, and is presented annually as a reward for public-spirited men and women who have aided the cause of humanity. Dr. Rusk was cited for his outstanding accomplishments in the field of rehabilitation of the physically handicapped.

A sizable delegation of Washington physicians were among the 3,500 psychiatrists from the United States and Canada who attended the **109th Annual Meeting of the American Psychiatric Association** at the Statler Hotel in Los Angeles, Calif., May 4–8. In addition to those who participated in panel discussions, seven members of the Medical Society of the District of Columbia contributed scientific papers. Subjects and authors of the papers were:

Papers on Group Therapy: "The Function of the 'Administrative Group' in the Mental Hospital Group Therapy Program," Dr. Bernard A. Cruvant

Section on Mental Hospitals: "Who Shall Be Taught," Dr. Addison M. Duval

Papers on Lobotomy: "Level of Achievement after Lobotomy, 1,000 Cases," Dr. Walter Freeman

Clinical Papers: "Reduction of Restraint through Activity Programs in the Veterans Administration," Drs. A. B. C. Knudson and John E. Davis

Papers Read by Title: "An Approach to Management Improvement in the U. S. Government: Five Years Experience with Analytically Oriented Groups of Executives," Dr. Henry P. Laughlin

Clinical Papers and CO_2 Papers: "Psychiatric Disturbances Following Amputation," Drs. T. Douglas Noble, Douglas Price, and Rodman Glider

Dr. Winfred Overholser was one of four speakers, including Dr. D. Ewen Cameron, President of A.P.A., who discussed "Perspectives in International Psychiatry" at a special program sponsored by the Committee on International Relations. Dr. Overholser participated in a round table dinner meeting devoted to "Medico-legal Aspects of Sexual Pathology" and presided as chairman at a sectional meeting on psychotherapy.

Dr. Daniel Blain, Medical Director of A.P.A., was moderator for a round table dinner meeting on "The Recruitment and Training of Residents in State Hospitals."

Two members of the District Medical Society participated in an open meeting of committees on professional standards: Dr. Duval, Chairman of the Committee on Psychiatric Hospital Standards and Policies, and Dr. George N. Raines, Chairman of the Committee on Nomenclature and Statistics. Dr. Raines was also moderator for a round table dinner meeting on "The Meaning and Use of Diagnosis in Psychotherapy."

Dr. Freeman discussed "Ethics of Psychosurgery" at a round table dinner meeting.

Discussants of scientific papers included Drs. Overholser, Raines, Dexter M. Bullard, Robert A. Cohen, Frieda Fromm-Reichmann, Robert T. Morse, and Harvey J. Tompkins.

In place of its regular May meeting, the **Washington Society of Pathologists** joined with the **Middle Eastern Region of the College of American Pathologists, the Baltimore Society of Pathologists, and the Section on Pathology and Laboratory Medicine of the District Medical Society** in sponsoring a two-

CALENDAR OF MEETINGS, APRIL 16–MAY 15, 1953

April 16	Graduate Nurses' Association
April 20	Obstetrical Board
	Traffic Committee
April 21	Grievance Committee
	Subcommittee on Diabetes
April 23	Program Committee, Annual Scientific Assembly
April 27	Executive Board
	Board of Directors, Diabetes Association of D. C.
	Jango Graduation, Doctors' Hospital
April 28	Committee on Radio, TV and Motion Pictures, A.S.A.
April 30	Health Section, United Community Services
May 1	Committee on Public Health
	Staff Meeting, Episcopal Eye, Ear and Throat Hospital
May 6	Business Meeting of Society
May 7	Section on Neurology and Psychiatry
May 8	Section on Pathology and Laboratory Medicine
May 9	Washington Psychoanalytic Society
May 11	Question Hour for Residents and Interns
May 12	Subcommittee on Mental Health
	Medical Officers' Reserve Units
May 13	Woman's Auxiliary
May 15	Section on Dermatology

day Regional Meeting in Washington, May 4 and 5. The meetings were held in the Sternberg Auditorium at the Walter Reed Army Medical Center. The following papers were contributed by members of the District Medical Society:

"Ectopic Lesions in Schistosomiasis Japonica," Lt. Colonel Lorenz E. Zimmerman, MC, USA, Armed Forces Institute of Pathology

"Morphologic and Biologic Changes in Tumors during Transplantation," Dr. Thelma R. Dunn, National Institutes of Health

"Protein-bound Iodine as a Measure of Thyroid Function," Dr. H. H. Leffler, Providence Hospital

"Needle Biopsy of Kidney in Renal Disease," Drs. Alvin E. Parrish and John H. Howe, Veterans Administration Hospital

"Histology and Histopathology of Gastric Mucosa as Seen in Suction Biopsy," Captain J. F. Metzger, MC, USA, and Colonel J. M. Blumberg, MC, USA, Walter Reed Army Hospital

"Pleomorphic Fibroadenomas of the Breast," Dr. Charles F. Geschickter, Professor of Pathology, Georgetown University School of Medicine.

"Hormone Excretion Studies in Rh Incompatibility," Drs. Oscar B. Hunter, Jr., and R. H. Fischer, Doctors Hospital

Dr. Kenneth L. McCoy, Vice President of the Washington Society of Pathologists, was Chairman of the Washington Program Committee and presided at the afternoon session, May 4.

The Washington, D. C. Chapter of the American College of Cardiology was organized on Sunday afternoon, February 22, at the Hotel Statler. Dr. Frank L. Williman presided as temporary chairman. Present at the meeting were 12 representatives from the Washington, D. C. area and several invited guests from the national office of the College. Among the latter were Dr. Robert Glover, President-elect of the College, Dr. George W. Calver, Trustee of the College and Physician to the Congress of the United States, Dr. Philip Reichert, Secretary, and Dr. Seymour Fiske, Treasurer. The Washington Chpater elected the following to serve as its first officers:

Dr. J. Burton Glenn, *President*; Dr. George W. Calver, *Vice President*; Dr. Irving Brotman, *Secretary-Treasurer*.

The newly formed Chapter acted as host for the Second Annual Convention of the College at the Hotel Statler, June 7–9. The Washington Chapter is the seventh affiliate of the College.

The Scientific Council of the Washington Heart Association held its second **Cardiac Clinic**, May 19, at the Georgetown University School of Medicine. The following program was presented:

"Mycotic Aneurysms of Intravascular Origin Complicating Subacute Bacterial Endocarditis; a Review of Literature and Report of Three Cases," Drs. Bruce I. Shnider and Nicholas J. Cotsonas

"Pulmonary Hypertensive Pain Relieved by Mitral Commissurotomy," Drs. Edward Mears, W. Proctor Harvey and Charles A. Hufnagel.

"The Surgical Correction of Aortic Insufficiency by Means of a Plastic Artificial Valve": Clinical Aspects, Dr. Harvey; Surgical Aspects, Dr. Hufnagel; Physiological Aspects, Dr. John C. Rose

"Several Cases of Unusual Pericarditis," Drs. Cotsonas and Sol Katz

"Analysis of the First 150 Cases Seen by an Internist in a Toxemia Clinic," Dr. Frank A. Finnerty.

Interns and residents of Washington hospitals were invited to attend **The Question Hour,** a program devoted to matters of nonscientific nature, sponsored by the Committee on Teaching Technics of the Medical Society of the District of Columbia, and held in the Society's auditorium, May 11.

Theodore Wiprud, Secretary of the Society, was moderator. The panel of "experts" who replied to questions which had been submitted to them in advance of the meeting were: Dr. Hugh H. Hussey, Chairman of the Committee on Teaching Technics; Dr. Frank E. Wilson, Director of the Washington Office of the AMA; Dr. Robert U. Cooper, surgeon and author of "Investments for Professional People"; Mr. Paul Foley, Assistant Secretary, D. C. Commission on Licensure; Mr. Warren E. Magee, Legal Counsel for the Medical Society; and Mr. John C. Post, of Professional Business Services.

The House Staff of Garfield Memorial Hospital sponsored the **Annual Alumni Day** at the Hospital, April 25. During the scientific program held in the morning in the Kellogg Building, the following papers were presented:

"The Diagnostic and Therapeutic Uses of Radioactive Isotopes," Dr. Ralph M. Caulk

"The Clinical Significance of Urinary Pregnandiol," Dr. Richard H. Fischer

"Hypotensive Anesthesia and the Use of Dextran," Dr. William E. Bageant

"Hypertension: Newer Concepts of Diagnosis and Management," Dr. William L. Howell

Following luncheon a Clinico-Pathological Conference was featured. Dr. W. LeRoy Dunn gave the case report; Dr. Maurice H. Friedman discussed the case; Dr. Theodore Winship gave the pathologic report.

The closing event was the Annual Medical Staff Dinner in the evening at the Kennedy-Warren. Winners of the Harry Hyland Kerr Awards were announced at this meeting. Chosen from 17 manuscripts which had been submitted in the competition by the House Staff, the prize-winning papers were:

First Award: "Pheochromocytoma with Paroxysmal Hypertension Simulating Hyperthyroidism," Dr. Hamdi Akar

Second Award: "Resilient Plastic Replicas of Pathological Specimens," Dr. Clemmer M. Peck

Third Award: "Carcinoma of the Prostate; a Study of Diagnostic Criteria," Dr. Charles B. Preacher

Honorable Mention: "Cancer of the Ovary," Dr. Catherine W. Johnson; "Water and Electrolyte Balance in Surgical Practice," Dr. William Chia-Len Liu.

The Medical and Surgical Staffs of Episcopal Eye, Ear and Throat Hospital were responsible for an interesting evening in the Medical Society's auditorium, May 1, when Dr. George J. Thomas, Director of the Department of Anesthesiology, St. Francis Hospital, Pittsburgh, presented a lecture and demonstration on "Fire and Explosion Hazards in Hospitals, and Their Control." Dr. William D. Foote was chairman for the meeting.

The Harrison County Medical Society was host to the Tri-County Medical Society in Clarksburg, West Virginia, May 7, at the Stonewall Jackson Hotel. The meeting opened with a Seminar on Gastrointestinal Diseases, under the direction of **Dr. Paul C. Kiernan,** Associate Professor of Surgery, Georgetown University School of Medicine. Dr. Kiernan contributed a paper on "Gastric Ulcer." Other speakers and the subjects they discussed were: **Dr. John C. Sullivan,** Associate in Medicine at Georgetown, "Common Disorders of the Small Bowel"; Dr. Louis Allen, radiologist at the Clinical Center, National Institutes of Health, "The Diagnosis of Early Cancer of the Colon"; and **Dr. Oscar B. Hunter, Jr.,** Director of the Oscar B. Hunter Memorial Laboratory, "Unusual Tumors of the Gastrointestinal Tract."

Members of the **Osler Society** were entertained by Dr. W. Dabney Jarman, May 25, at his home on 35th Street. Dr. G. Burroughs Mider, Director of the National Cancer Institute, was present to speak on "Cancer Research—Present and Future."

Dr. Robert B. Nelson was host to the Society on April 27. Dr. Marshall deG. Ruffin presented a paper on "Psychiatric Emergencies"; Dr. Hilbert S. Sabin gave a case report on "Genitourinary Tuberculosis."

The George Martin Kober Medical Society met, April 20, at the Army-Navy Club. Dr. John E. Morris read a paper on "Hodgkin's Disease as a Cause of Back Pain."

The Louis Mackall Medical Society elected the following officers, April 16:

Dr. Paul Kiernan, *President*; Dr. William L. Howell, *Vice President*; Dr. Hilbert S. Sabin, *Secretary-Treasurer*.

The Society held its annual outing, May 13, at the Kenwood Country Club. An afternoon of golf was followed by dinner and light entertainment in the evening at the Clubhouse. The new president, Dr. Kiernan, presided at the banquet. Dr. M. Noel Stow was in charge of the program.

The Board of Directors of the **Diabetes Association of the District of Columbia** held its annual meeting and election of officers in the Medical Society's building, April 27. The new officers are:

Dr. Lawrence J. Thomas, *President*; Dr. John E. Cassidy, *First Vice President*; Dr. E. Clarence Rice, *Second Vice President*; Dr. Louis K. Alpert, *Secretary-Treasurer*.

At the annual meeting of the **Attending Staff of Emergency Hospital,** April 20, the following officers were reëlected:

Dr. Arch L. Riddick, *President*; Drs. John A. Reisinger and Benjamin F. Dean, Jr., *Vice Presidents*; Dr. Frank S. Ashburn, *Secretary*.

New members of the Attending Staff, appointed April 20, are: Dr. Marshall Sanford, Attending Surgeon; Dr. F. Turner Reuter, Associate in Urology; Drs. Louis Craig, Jr., Frank G. MacMurray, and Richard T. Sullivan, Assistant Attending Physicians. Dr. Walter K. Myers was granted leave of absence from his appointment as Senior Attending Physician and Dr. R. Bretney Miller, Attending Physician, was appointed to take Dr. Myers' place.

Dr. Forrest V. Schumacher was appointed to the staff as Associate in Radiology a few months ago.

Drs. Ralph M. Caulk and J. Keith Cromer read papers, April 21, at the 35th Annual Meeting of the American Radium Society, which was held in St. Louis, April 20–22. Dr. Caulk, Senior Attending Radiologist at Garfield Memorial Hospital, presented a paper on "Transvaginal Roentgen Therapy in Cancer of the Cervical Stump." A report on "The Effect of Intramuscular Administration of Large Doses of Aureomycin on the Response of Carcinoma of the Uterine Cervix to Radiation Therapy," authored by Drs. Jeanne Bateman, Charlotte Donlan, J. Keith Cromer and Calvin T. Klopp, all of the staff of the George Washington University Cancer Clinic, was read by Dr. Cromer.

New officers of the **Washington Gynecological Society** were installed at a meeting in the Carlton Hotel, May 9. They are:

Dr. Samuel M. Dodek, *President*; Dr. Howard P. Parker, *First Vice President*; Dr. Stafford W. Hawken, *Second Vice President*; Dr. Joseph B. Sheffery, *Secretary*; Dr. Philip P. Steptoe, *Treasurer*; Dr. Edmund D. Daley, *Historian*.

Dr. Andrew A. Marchetti, retiring President, and Dr. J. Keith Cromer, retiring Secretary, were elected to membership on the Executive Council.

The Section on Pathology and Laboratory Medicine elected new officers at its business meeting, May 8. They are:

Dr. Oscar B. Hunter, Jr., *Chairman*; Dr. Frank Konzelmann *Vice Chairman*; Dr. Edward C. McGarry, *Secretary-Treasurer*; Dr. E. Clarence Rice, *Counselor*.

The AMA Committee on Medical Motion Pictures has announced the publication of a supplement to the list of films available through the motion picture library. This supplement includes 12 motion pictures added to the library since publication of the December 1, 1952 catalog.

A supplement to the list of health education motion pictures cleared for use on television is also available. This supplement lists 38 motion pictures which have been cleared for television use since publication of the original list in 1951.

Copies of these publications may be obtained by writing to the Committee on Medical Motion Pictures, AMA, 535 North Dearborn Street, Chicago 10, Illinois.

Sample copy of a new lay educational booklet, **"Multiple Sclerosis,"** produced by the National Multiple Sclerosis Society in coöperation with the National Institute of Neurological Diseases and Blindness, U. S. Public Health Service, was sent to the Editorial Offices of the MEDICAL ANNALS. The 40-page booklet, the first of its kind for laymen, consists of six sections on history, symptoms, diagnosis, treatment, research and self-help; it attempts to provide the patient with a guide for understanding the nature of his disorder and the means available for controlling it. While no specific therapy for multiple sclerosis exists, the booklet emphasizes, considerable personal adjustment to its problems are possible. Copies of the booklet may be obtained without charge from the National Multiple Sclerosis Society, 270 Park Avenue, New York 17, N. Y., or from the Washington, D. C. Chapter of the Society, Dupont Circle Building, Washington, D. C.

The District of Columbia Mental Health Association was organized, May 4, in the auditorium of the North Building, Department of Health, Education and Welfare during Mental Health Week. A temporary organization committee, representing various community interests, took the initiative in the formation of this voluntary association, comprising lay and professional citizens, whose basic aim is to promote mental health in the community. Included as members of the committee on organization were Drs. Addison M. Duval, Julius Schreiber and Leopold E. Wexberg.

Officers elected to serve the new organization were: Mr. G. Howland Shaw, Secretary of United Community Services, President; Mrs. Frank F. Strope, President, D. C. Congress of Parents and Teachers, First Vice President; Mrs. Colman B. Stein, Second Vice President; Mrs. Murdaugh S. Madden, Recording Secretary; Mrs. Julia Y. Fickling, Corresponding Secretary; Mr. Harry C. English, Treasurer. Dr. C. Herbert Marshall, Jr., President of the Federation of Civic Associations, was the only physician elected to membership on the Board of Directors. Dr. Marshall was elected for a one-year term.

A public meeting on the general subject of mental health followed the election of officers. The Honorable Luther W. Youngdahl, United States District Judge, gave the main address on "Our Mental Health Needs Nationally." Mr. Shaw, newly elected President and Chairman of the Subcommittee on Mental Health, District of Columbia Survey on Medical Care for Indigents and Related Services, reported on the Survey and discussed "Our Mental Health Needs Locally." Judge Youngdahl was elected Honorary President of the new Association.

Members of the **Section on Gastroenterology** met for dinner at the Chevy Chase Country Club, May 11. Dr. Sidney C. Cousins was host. Dr. Mark M. Revitch, Chief Surgeon of Mt. Sinai Hospital, New York, was the guest speaker. The subject of his address was "Modern Viewpoints on Surgery of Anus and Lower Colon in Carcinoma of the Colon."

The Health Department of the District of Columbia opened its first **heart disease detection clinic,** April 20, at the Southwest Health Center. Free examinations will be given only once a week, on Monday, from 9 a.m. to noon. Dr. John R. Pate, Director of the Center, said the Health Department hopes to expand the program if there is sufficient demand. The service is being financed by a Public Health Service grant. Its function will be solely to detect previously unknown cases of heart disease and refer the patients to physicians for treatment. The telephone number of the heart clinic is District 7–1834.

Funds totaling $21,271 have been granted to **George Washington University School of Medicine** for studying the effects on cancer of aureomycin, terramycin, and penicillin when they are used in conjunction with mustard drugs and X-ray treatments. The studies will be carried out under the direction of **Dr. Jeanne C. Bateman,** Clinical Instructor in Medicine at the School of Medicine and Consultant in Hematology at the University's Cancer Clinic.

Two drug companies, the Lederle Laboratories Division of the American Cyanamid Company, Pearl River, New York, and the Charles Pfizer Company, Brooklyn, New York, are providing $12,000 and $9,271, respectively.

Previous research by Dr. Bateman has shown that the antibiotics mentioned above, when used intravenously, have physiological effects on kidney and liver functions which are of importance in other diseases as well as cancer. The new grants will aid in furthering and expanding these studies, which have been and will continue to be partially financed by funds from the American Cancer Society.

Dr. Melvin A. Casberg has been appointed Assistant to the Secretary of Defense (Health and Medical). The new office of Assistant to the Secretary will replace the Armed Forces Medical Policy

Council, of which Dr. Casberg has been chairman since April, 1952. It will be responsible for all health and medical matters within and involving the Department of Defense. In addition, the office will establish and review for the Armed Forces all health and medical policies, plans, standards, and criteria. It will maintain liaison with all other governmental and civilian health and medical agencies or associations on a national and international basis on matters of mutual interest or responsibility. Dr. Casberg is an Honorary member of the Medical Society of the District of Columbia.

Several months ago the Federal Civil Defense Administration recommended that first aid stations be established in Government agencies, in private office buildings, and in industrial plants for use in time of emergency. In compliance with this recommendation, the Department of Agriculture, under the supervision of **Dr. Leo J. Schildhaus,** of the Division of Employee's Health, has established such stations for the protection of about 8,700 employees in the Washington Metropolitan Area. A total of 11 fully equipped first-aid stations are now set up in the Department, with 50 trained volunteers to man each station. It is estimated that each unit will be able to take care of approximately 500 casualties during the first 8 hours of an emergency. A picture of the first aid cabinet designed by Dr. Schildhaus, and displayed in the Medical Society's building during the Society's Second Midwinter Seminar in March, appears on page 179 of the May 9 issue of the *Journal of the AMA*.

Dr. Aubrey O. Hampton, Chief of the Department of Radiology, Garfield Memorial Hospital, **and Dr. William L. Howell,** Assistant Clinical Professor of Medicine, Georgetown University School of Medicine and Cardiologist-in-chief, Garfield Hospital, were guest speakers at the Centennial Anniversary Session of the Texas Medical Association, which was held at the Shamrock Hotel in Houston, Texas, April 26–29, 1953.

Dr. Hampton addressed the Section on Radiology, April 29, on "Roentgen Diagnostic Criteria of Benign Gastric Ulcer and of Carcinomatous Ulcers." Dr. Howell appeared before the Section on Internal Medicine, April 28, to discuss "Endocardial Sclerosis."

Both physicians are former Texans and graduates of Baylor University College of Medicine, Dr. Hampton of the Class of 1925 and Dr. Howell, 1928.

Dr. R. Lomax Wells, Medical Director of the Chesapeake and Potomac Telephone Companies, participated in a Panel Discussion, May 7, on "A Place for the Cardiac in Industry," which was part of a program given under the auspices of the Maryland State Industrial Accident Commission and the Management of the Department of Safety. The Governor's Safety-Health Conference and Exhibit was held at the Lord Baltimore Hotel in Baltimore, May 7 and 8.

Dr. Wells attended the Industrial Health Conference in Los Angeles, Calif., April 20–25, and was elected a member of the Board of Directors of the Industrial Medical Association for a two-year term.

Dr. Preston A. McLendon, Professor of Pediatrics, George Washington University School of Medicine, participated in a Symposium on Pediatrics at the Beckley Elks Club, Beckley, West Virginia, May 20, which was sponsored by the Committee on Medical Education of the West Virginia State Medical Association. Dr. McLendon spoke at both the morning and afternoon sessions. The topics he presented were "New Problems in Child Care" and "Infant Feeding and Nutrition in the Older Child."

Two papers of especial interest to readers of the MEDICAL ANNALS were presented at the Annual Meeting of the **American Heart Association** in Atlantic City, New Jersey, April 8–12. Drs. Benjamin Manchester and Boris Rabkin presented a paper on "The Control of Dicumarol Therapy by a Simple Blood Prothrombin Test." Both physicians are faculty members of the George Washington University School of Medicine; Dr. Manchester is Assistant Clinical Professor of Medicine and Dr. Rabkin, Clinical Instructor in Medicine.

Dr. Frank A. Finnerty, Jr. read a paper on "The Veratrum Treatment of Toxemia of Pregnancy; a Controlled Study," co-authored by Dr. George Fuchs. Dr. Finnerty and Dr. Fuchs are on the staff of Gallinger Municipal Hospital.

The Clinico-Pathological Society held its regular monthly meeting, May 19. Colonel Thomas Mattingly and Colonel Paul Fancher were co-hosts to the Society at the home of the former in Chevy Chase, D. C. Two case reports were presented: "Pancreatic Cyst," Dr. John H. Lyons; "Cat Scratch Disease," Dr. Worth B. Daniels.

Dr. William P. Herbst, President of the Society, presided at the Society's annual banquet at the Chevy Chase Club, April 21.

Dr. Francis M. Forster, Professor and Head of the Department of Neurology, Georgetown University School of Medicine, was elected Vice President of the American Academy of Neurology at its Annual Meeting in Chicago, April 11.

Dr. I. Phillips Frohman presented a paper entitled, "Starting in Practice" before members of the Student American Medical Association and interns and residents of the University of Virginia School of Medicine at Charlottesville, April 21.

Dr. Frohman also participated in a panel discussion with Dr. Thomas Edwards, general practitioner and a member of the faculty of the Medical School; Dr. George Chucker, Monterey, Va.; and Mr. E. J. Fisher, Jr., Director of the Virginia Council on Health and Medical Care. The general subject for discussion was the establishment of a practice. The satisfactions and opportunities as well as disadvantages of general practice in urban, small town and rural communities were considered.

Dr. Robert E. Moran read a paper on "Lateral Decompression of the Orbit for Exophthalmos" at the Annual Meeting of the American Goiter Association at the Drake Hotel, Chicago, May 7–9.

A paper on "The Surgical Treatment of Thyroid Cancer with Cervical Lymph Node Metastasis," prepared jointly by **Drs. Calvin T. Klopp, Z. Zuska and Theodore Winship,** was presented at the same meeting.

Dr. Charles S. Coakley, Professor of Anesthesiology at the George Washington University School of Medicine, presented a paper on "The Anesthetic Management of a Chest Case" at the Chest Disease Conference at Mercy Hospital, Baltimore, April 9.

On March 3 Dr. Coakley read a paper on "The Anesthetic Management of Patients with Reduction in Pulmonary and Circulatory Function" at a meeting of the Anesthesia Section of the Baltimore City Medical Society.

Rear Admiral Lamont Pugh, Surgeon General of the Navy, was the guest speaker at a Public Health Forum of the Harvard School of Public Health in Boston, Mass., April 28. The Surgeon General spoke on the subject, "The Global Concept of Preventive Medicine in the U. S. Navy."

Dr. George C. Ruhland, former District health officer, was appointed by the Commissioners of the District of Columbia to represent the District at the First Western Hemisphere Conference of the World Medical Association in Richmond, Va., April 21–25. In this issue of the MEDICAL ANNALS Dr. Ruhland relates some of his impressions of the Conference, which commemorated advances in medicine during the past 75 years.

GEORGE C. RUHLAND, M.D.

Dr. Paul C. Kiernan, Associate Professor of Surgery, Georgetown University School of Medicine, was elected to membership in the Southern Society of Clinical Surgeons at its recent meeting in Cincinnati, Ohio. He was also elected a member of the Eastern Surgical Society at its April meeting in

Baltimore. **Dr. Frank S. Ashburn,** Instructor in Thoracic Surgery at Georgetown, was elected to membership in the latter organization at the same time.

Dr. Wolcott L. Etienne, of College Park, Md., will represent the Prince Georges County Medical Society on the new board of Prince Georges General Hospital. Dr. Etienne is an Associate member of the District Medical Society.

Drs. Morris E. Krucoff and Aubrey D. Fischer coöperated with the Washington Hearing Society, May 5 and 6, by giving lectures and demonstrations of ENT examinations and hearing tests in the American Legion Auditorium during National Hearing Week.

Dr. Eugene deSavitsch was in Cambridge, Mass., April 25 and 26, where he delivered two lectures at Harvard University on the subject of "Balance of Power." The lectures were under the auspices of Professor Bruce Hopper of the University.

Dr. Joseph V. Kennedy was elected First Vice President for the Merrick Boys' Camp at the 19th annual spring dinner of the Camp's 100 directors. The meeting was held at the Columbia Country Club, May 6. Plans are being made to send 650 underprivileged boys to the Camp in July.

Dr. Leon Gerber has been named Chairman of the Medical Division of the 1953 Greater Washington Jewish Appeal.

Dr. Desmond S. O'Doherty announces the opening of a laboratory for electroencephalography at 1714 Rhode Island Avenue, N.W.

Dr. Arthur B. Wein was recently certified by the American Board of Orthopedic Surgery.

Lt. Colonel Francis D. Threadgill, MC, USA, writes that he has completed his tour as Division Surgeon with the Third Division in Korea and that he will be out of the military service sometime this summer, probably in August. At the time of writing, he was serving as Chief of Surgery at the 343rd General Hospital near Tokyo.

In his letter to the Medical Society's Secretary, he stated that he was able to obtain, through various efforts, approximately three truck loads of clothing for Korean war orphans, "which were certainly put to good use." Some of this clothing was shipped to Colonel Threadgill by members of the District Medical Society and the Woman's Auxiliary.

Dr. Frederick W. Coe, who was assigned to the West Coast by the Public Health Service for the past two years, has returned to Washington and is engaged in the practice of internal medicine with Dr. William Earl Clark and associates at 1835 Eye Street, N.W.

Dr. J. Blaine Fitzgerald, an Associate member of the Medical Society of the District of Columbia, was recalled to active duty in the Navy and is stationed at the U.S. Naval Hospital in Bainbridge, Maryland.

Mr. Melvin L. Dollar, who has served as Executive Director of Group Health Association for the past 7 years, has resigned his position in order to join the building and contracting firm of E. L. Klavans.

GP LECTURES WELL ATTENDED

Three chapters of the American Academy of General Practice held their first one-day session at the Mayflower Hotel on April 22, 1953. Sponsored by the District of Columbia, Prince Georges County and Montgomery County Chapters, an outstanding program of distinguished speakers attracted over 200 physicians who registered for the lectures. The program, which was published recently in the MEDICAL ANNALS in its entirety, included such distinguished physicians as Dr. Philip Thorek, Dr. Erwin Neter, and Dr. H. K. Hellerstein.

There were 168 present at the luncheon where the Secretary of Agriculture, Ezra T. Benson, was the guest of honor. Dr. U. R. Bryner of Salt Lake City, Utah, who is President of the American Academy of General Practice and a personal friend of Mr. Benson, spoke on "Socialized Medicine in Great Britain." Dr. Bryner was one of a group of American physicians sent by the American Medical Association to make an on-the-scene investigation of the condition of medical care in Great Britain.

Dr. I. Phillips Frohman, of the District of Columbia Chapter, was Master of Ceremonies at the luncheon. In addition to the distinguished physicians present, he introduced Miss Barbara Benson, the daughter of Secretary Benson, and Miss Mary K. Ross, of the Department of Public Relations of the AMA, who were guests at the luncheon. The various speakers commented on how well they were received and most of them requested that they be invited to return for the next session. Physicians in attendance came from 8 nearby states.

No medical meeting of this type can be successful without the aid of the ladies at the registration desk. This task was ably and graciously handled by Mrs. Frohman, Mrs. Sherman A. Thomas and Mrs. J. DeWitt Fox.

The committee on arrangements included the following physicians: Drs. William Brainin, Merrill Cross, Morris Kossow, and Sherman A. Thomas, and much of the success of this meeting was due to the excellent coöperation of the committee in charge.

I. Phillips Frohman, M.D.

MEMBERSHIP

The following applicants for membership will be voted on at the meeting of the Executive Board, July 27, 1953.

For Active Membership

John P. Adams, Washington University—1945
Randolph Kelley Brown, Howard University—1938
Samuel L. Bullock, Howard University—1937
Bernard R. Cooperman, George Washington University—1949
Thomas G. Edison, Washington University—1945
W. Luther Hall, George Washington University—1947
Joseph L. Johnson, University of Chicago—1931
Lorin E. Kerr, University of Michigan—1935
Frank P. Lloyd, Howard University—1946
Ira Weiss Pearlman, Georgetown University—1947
Clemmer M. Peck, University of Maryland—1946
Robert Stewart Randall, Howard University—1940
Alvin F. Robinson, Howard University—1939
Charles J. Savarese, Jr., George Washington University—1950
Frank H. Small III, Georgetown University—1947

For Associate Membership

Charles Farwell, Tulane University—1949
August Carl Herman, University of Pennsylvania—1949
Byron H. Johnson, University of Buffalo—1945
Joseph A. Kiesel, Georgetown University—1949
Charles F. McCaffrey, Georgetown University—1933
Benjamin Miller, University of Maryland—1933
Paul A. Morin, D.M.D., Tufts College—1934
Bernard R. G. Nebel, University of Rochester—1945
Harold Segall, Ohio State University—1947

For Resident-Intern Membership

Sam C. Pascoe, Vanderbilt University—1950

Recent changes in membership status:

Reinstated to Active

Lee McCarthy
James E. Fitzgerald

Active to Associate

George J. Carroll
Vincent J. Dardin
G. Bache Gill
Henry B. Gwynn
Karen Howard
Charles R. Hughes
John Kehoe
Lucy D. Ozarin
Thomas F. Quinn
John B. Ross
John F. Stapleton
Robert O. Warthen
Roland F. Wilkinson
Clayton E. Wood

Resigned

Active

Henry D. Beale
Van Wyke Gunter
Robert C. Hawkins II
Hubert F. Manuzak
William B. Marbury
William G. Puryear
Edward B. Tuohy
Merton E. Twogood
Karl F. Welte
John F. Westfall

Associate

Errett C. Albritton
James T. Boyd
Eugene P. Cronkite
A. H. Fechner
Vincent H. Gillson
Thomas A. Haedicke
George A. Hardie
Thomas E. Mattingly, Jr.
Dina B. Rappaport
Adrian Recinos, Jr.
Mario Scandiffio

CORRESPONDENCE

College Park, Md., March 17, 1953

To the Editor:

I have just read the editorial article by Gannon in the January number of the Annals, and lest it be taken as backed by the consensus of the Society and of the Editorial Board (although at the bottom of the first editorial page you specify that the editorials "do not necessarily reflect the views of the Medical Society"), I should like to have you publish another personal experience.

Some ten years ago I too had Dupuytren's contracture of the palmar fascia involving the ring finger and to a lesser degree the little finger of my right hand, not enough contracture to be disabling, but distinctly inconvenient. The left hand was just starting to be involved, as is so common. I have treated at least half a dozen in which both hands were involved.

If any one can remember an article on "Constitutional Factors in the Neoplastic Diseases,"[1] published in the ANNALS 20 years ago, he may rightly infer that I think of Dupuytren's as a neoplastic disease, and further that the involvement of the second hand is but an extension of the disease to another tissue with special susceptibility because of its physiologic similarity.

As to treatment, excision of the palmar fascia, while still popular, reminds me of the application of leeches to Joe Stalin for his extensive cerebral hemorrhage. It should be confined to the storybooks of the last century. A careful, mild application of radium, held in the palm of the hand for possibly half an hour while the patient sits in the office of the attending physician, repeated possibly 2 or 3 times at monthly intervals, surely gives the minimum disability at the time of treatment, without hospitalization, anesthesia or later physiotherapy, and with perfect final results. The new growth simply regresses and returns to normalcy. My hand is at your disposal for examination at any time. No, I am not looking for patients. I have retired and sold all my radium.

Few of you may appreciate as I do the slowness of the acceptance of new concepts by the medical fraternity. The concept of neoplastic diseases as many different diseases each with its own specific cause and characteristic symptoms, each deserving its specific line of treatment, has been urged for nearly half a century by James Ewing and his followers. But as far as I have found out that concept has not been accepted enough to be pushed by any of our rich and great cancer institutions or research foundations. To wholeheartedly accept and push that concept would give a great boost to cancer therapy. Why can we not study one neoplastic disease at a time?

Sincerely,
TRUMAN ABBE, M.D.

ROCHESTER, N.Y., May 14, 1953

TO THE EDITOR:

Your very kind remarks and the review of our booklet, X-rays and You, which appeared in the recent issue of MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA were very much appreciated.

We have been making this publication available to doctors and hospital administrators for free distribution for about 15 years. Somewhat over a million copies of a previous version were distributed. The one which you reviewed is entirely new from start to finish, and it has met with a very wide acceptance.

In one year and a half we will have distributed three quarters of a million through the profession. For the last few months the orders for quantities of this book for distribution on Hospital Day were quite overwhelming.

Again thanks for your very fine review.

Yours very truly,
G. R. STRUCK
Manager, Medical Division, Eastman Kodak Company

BOOKS RECEIVED

Acknowledgment is made of the following books which have recently been received. Selections will be made for more extensive review in the interests of our readers and as space permits. Physicians are urged to submit reviews of additional current books which, in their opinion, merit comment.

An Atlas of Surgical Exposures of the Extremities. SAM W. BANKS, M.D., Associate Professor of Orthopaedic Surgery, Northwestern University Medical School; Attending Orthopaedic Surgeon, Chicago Memorial Hospital and Woodlawn Hospital; AND HAROLD LAUFMAN, M.D., PH.D., Associate Professor of Surgery and Director of Experimental Surgery, Northwestern University Medical School; Associate Attending Surgeon, Michael Reese Hospital. Price, $15.00. Pp. 391, with 552 illustrations and 179 plates. Philadelphia: Saunders, 1953.

Children of Divorce. J. LOUISE DESPERT, M.D. Price, $3.50. Pp. 282. Garden City, N. Y.: Doubleday, 1953.

Physical Examination of the Surgical Patient. J. ENGLEBERT DUNPHY, M.D., F.A.C.S., Associate Clinical Professor of Surgery, Harvard Medical School; Surgeon, Peter Bent Brigham Hospital; Consultant in Surgery, Children's Medical Center; AND THOMAS W. BOTSFORD, M.D., F.A.C.S., Clinical Associate in Surgery, Harvard Medical School; Senior Associate in Surgery, Peter Bent Brigham Hospital; Associate in Surgery, Children's Medical Center. Price, $7.50. Pp. 326, with 188 figures. Philadelphia: Saunders, 1953.

The Ciba Collection of Medical Illustrations. Vol. I. Nervous System. A Compilation of Pathological and Anatomical Paintings prepared by FRANK H. NETTER, M.D. With a foreword by John F. Fulton, M.D., Sterling Professor of the History of Medicine,

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[1] ABBE, T.: M. Ann. District of Columbia, 1933, **2**, 219.

Yale University School of Medicine. Price, $6.00. Pp. 143, with 104 full color plates. Summit, New Jersey: Ciba Pharmaceutical Products, Inc., 1953.

Collected Reprints of the Grantees of the National Foundation for Infantile Paralysis, 1951. Vol. XII, Parts I and II. New York: National Foundation for Infantile Paralysis, 1953.

The Psychiatrist and the Law. The Isaac Ray Award Book. WINFRED OVERHOLSER, M.D., Sc.D., Superintendent, St. Elizabeths Hospital; Professor of Psychiatry, George Washington University School of Medicine; Past President, American Psychiatric Association. Price, $3.50. Pp. 147. New York: Harcourt, 1953.

Anticonvulsants—Smith and Forster

(*Continued from page 282*)

medications without much success, were given one or more of the compounds, Mysoline, Milontin and 1461L.

2. Mysoline was effective with and without other medications in all types of seizures, whereas Milontin reduced the number of petit mal seizures and some forms of psychomotor attacks; 1461L cleared up petit mal and also increased the number of convulsions.

3. Toxic signs were easily recognized and were minor in severity and frequency.

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2. ZIMMERMAN, F. T.: Use of methylphenylsuccinimide in treatment of petit mal epilepsy. Arch. Neurol. & Psychiat., 1951, **66**, 156.
3. MILLICHAP, J. G.: Milontin: new drug in treatment of petit mal. Lancet, 1952, **2**, 907.

Antibiotics and Chemotherapy—Martin

(*Continued from page 288*)

96. In cases of meningococcemia the blood pressure should be checked every 15 minutes in order that any radical fall in blood pressure heralding the onset of adrenal failure (Waterhouse-Friderichsen syndrome) may be detected. Timely use of the steroids may prevent exodus.

97. Brill's disease (recrudescent epidemic typhus), murine typhus, Rocky Mountain spotted fever, and Q fever respond satisfactorily to aureomycin or terramycin.

98. Coagulant action of the blood probably is not increased by antibiotics.

99. The amount of an antibiotic in the urine does not represent the renal tissue content of the drug. The latter is probably more important.

100. Acidification of the urine is indicated when penicillin is being used against organisms which have invaded the urinary tract. Alkalinization of urine is indicated when streptomycin, terramycin, neomycin, chloramphenicol or bacitracin is used against urinary invaders, since the antibacterial effect of these drugs is increased with an increasing pH.

101. Cortisone and ACTH have a rare but satisfactory application in severe reactions due to hypersensitivity to penicillin and other antibiotics. Be very cautious in using the steroids in the presence of any infection.

102. The mode of action of the antibiotics is not known. The most commonly expressed hypothesis is that they interfere with certain enzyme systems in an irreversible manner.

Psychiatric Referral—Adland

(*Continued from page 291*)

to that situation would be severely threatening to the self-esteem. The alcoholic's bottle may represent a last ditch stand against facing his intense feelings of dependency, worthlessness and anger, which realization might precipitate an open psychotic break. But for each of these patients a psychiatric evaluation is worthwhile in order to assess the positive and negative elements of the total situation. Sometimes our efforts need to be directed at having our patient join with groups of people with similar problems or with groups of people who can offer supportive help. For example, the alcoholic may be much helped by Alcoholics Anonymous, and hiking clubs, glee clubs, and social church activities may be supportive for many other individuals.

As regards the age of the patient, there are different goals. The child and young adult need to have all of their self functioning at maximum in order to meet the complexities of a disturbed world. The older person may best be helped by a more limited goal of adjustment to the demands of the more immediate environment. But age itself is no contraindication for psychiatric referral.

Although it may be startling to hear me say that I feel each emotionally troubled person merits consideration by a psychiatrist, I in no way mean to imply that each person, in our present state of knowledge, can be assured relief or cure. Better total handling of a patient is possible only after his development, present state and external circumstances are evaluated. What appears as lack of sincerity in a patient should not be taken at its face value as a contraindication to psychiatric referral, because this in itself may be one of the major defensive symptoms the patient presents.

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1. Alexander, F., French, T. M., and others: Psychoanalytic Therapy: Principles and Application. New York: Ronald, 1946, pp. 99-102.

Endometriosis—Bieren

(*Continued from page 300*)

the complaint that she had been trying to conceive for 2 years. During the past year her menses had become increasingly painful, and after the last one the pain persisted. Vaginal examination found the pelvis filled with a tender, cystic mass. At operation large "chocolate" cysts were discovered in both ovaries. It was possible to resect them both, and a normal-appearing fragment of each ovary was left. She has since had 2 pregnancies, 1 of which ended in spontaneous abortion and the other in the birth of a fair-haired baby girl. It is 6 years since the original surgery, and her pelvic organs remain free and normal on vaginal examination. She is now hoping to conceive again. It is not always possible to remove these lesions completely. In 1 woman, with a recurrence 3 years after her first operation, a "chocolate" cyst was found completely filling the cul-de-sac. The sigmoid colon and bladder were so involved in the mass that it would have been necessary to resect a portion of both in order to get to the cyst. Even then it is doubtful if t could have been completely excised. Enough of the cyst wall was excised to provide tissue for examination. The woman was 37 years old, and roentgen castration was considered the treatment of choice.

After castration some women develop severe menopausal symptoms. Estrogen need not be withheld unless its use evokes a painful lesion. In such cases testosterone may be used in small, intermittent doses to secure relief from the hot flushes.

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2. TeLinde, R. W., and Scott, R. B.: Experimental endometriosis. Ibid., 1950, **60**, 1147.
3. Dardin, V. J.: Mesodermal potentials. M. Ann. District of Columbia, 1952, **21**, 591.
4. Klüver, H., and Bartelmez, G. W.: Endometriosis in rhesus monkey. Surg., Gynec. & Obst., 1951, **92**, 650.

Report of Committee on Medical Ethics and Deportment

(*Continued from page 317*)

Emmett P. Madigan, M.D.
Leo Brison Norris, M.D.
William B. Walsh, M.D.
Robert E. Moran, M.D., *Advisory*
Hugo V. Rizzoli, M.D., *Advisory*
Theodore Wiprud, *Secretary*

Southern Pediatric Seminar

(*Continued from page 325*)

taking their wives and children with them. Provision is made for the housing of families.

Any general practitioner who is anxious to catch up on what is new in the field of pediatrics or obstetrics is urged to write for further information to Dr. D. L. Smith, Registrar, Saluda, North Carolina.

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RELATIVITY OF CHEMICAL FACTORS INVOLVED IN CANCER OF THE PROSTATE AND METABOLIC RESEARCH*

WILLIAM P. HERBST, JR., M.D., F.A.C.S.
Washington

IN VIEW of the fact that the Kober Lecture was endowed in part to provide continuing justification for the use of animals to advance medical science through research, it is of more than ordinary interest to realize that research activities relating to prostatic malignancy in which I have engaged was activated through the following circumstances.

A scientific exhibit at the Annual Scientific Assembly of the American Medical Association in New York City presented by Dr. Charles Huggins in 1940 was very impressive. In this exhibit Huggins demonstrated that the administration of stilbestrol to senile dogs who had benign hyperplastic prostate glands produced atrophy of the benign prostatic epithelial cells and reduced the size of the gland. Two months later a patient, who happened to have been associated with my father from the time I was less than a year old, presented himself with a prostatic malignant mass which was as large as a fist and which produced nocturnal frequency from 10 to 12 times a night accompanied by painful, relatively ineffective bladder emptying. The situation had been developing for some time and had resulted in malnutrition and a marked degree of general physical exhaustion. While pondering over what to do, the exhibit of Huggins came to mind and I wondered what would happen to a prostatic malignant epithelial cell if an estrogen were given, in view of the fact that Huggins had demonstrated that stilbestrol produced atrophy of a hyperplastic epithelial cell in the dog.

With this question in mind I decided to give 1 mg. of estradiol dipropionate, which happened to be available in the office, by hypodermic, as "a shot in the dark." What happened in the subsequent 48 hours was about as spectacular a change in clinical course as I have ever witnessed. The patient had voided without discomfort with a satisfactory stream only 4 times the night before. His morale was markedly improved, his appetite was good, and the malignant mass actually seemed less firm. Estradiol dipropionate was given hypodermically 3 times a week for a total of 9 injections. At this time he was feeling so well that the treatment was discontinued. From this time until his death, which was 5 years later, his treatment consisted of a combination of estrogen therapy, castration, transurethral prostatic resection for obstruction, and general supportive measures. Autopsy demonstrated severe involvement of the bladder wall.

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* This article is a condensation of the George Martin Kober Lecture delivered at Georgetown University School of Medicine, March 25, 1953.

This patient and 6 others with advanced prostatic carcinoma, in whom estrogen therapy was instituted, were observed and reported on at the meeting of the Mid-Atlantic Section of the American Urological Association which met in Washington, D. C., in March, 1941. This was the first report of this type of treatment. These observations were so impressive that the involved biologic problems demanded continued correlating investigations.

CHRONOLOGICAL CONTRIBUTIONS IN BIOCHEMICAL TREATMENT

Urine, which is a biochemical solution, was used therapeutically centuries ago, but modern biologic-chemical therapy in this field began in the late 1800's through the contribution of J. W. Wright,[1] of Philadelphia, who reported on the effects of castration in the management of obstructive hypertrophic prostatitis in the *Annals of Surgery* in 1893. At this same time the British were practicing bilateral oöphorectomy in women suffering from inoperable carcinoma of the breast malignancy (Lett[2]). Huggins reactivated castration and correlated it with a chemical reduction in androgen. Final observations on the effectiveness of the administration of estrogen is still not possible in view of the fact that Huggins told me recently that he still had 2 patients of the first 20 that he castrated controlled satisfactorily, and I have 1 of the first 7 which I reported originally still controlled. Radiation of the prostate and testicles was reported by Munger,[3] and radiation of the adrenals and of the pituitary was reported by me.[4] Bilateral adrenalectomy, as performed by Huggins and Scott,[5] was reported in 1945 before it was possible to maintain them satisfactorily. Removal of the pituitary surgically was reported by Scott and Walker in "The Year Book of Urology," 1952. Administration of cortisone has now been done by a large number of physicians. The successful maintenance of bilaterally adrenalectomized patients, as reported by Thorn and Harrison,[6] and now many others, is an outstanding milepost in our progress in this field. As a result of these contributions and observations since 1941, the following plan for the management of inoperable prostatic cancer has been evolved:

1. It is emphasized that removal of the entire prostate and vesicles is the treatment of choice when it is felt that this is feasible.
2. When removal of a prostatic cancer in its entirety is not possible, but there are no symptoms in the way of obstruction or otherwise, no treatment of any kind is indicated, but the patient should be kept continuously under observation.
3. In the event that inability to completely empty the bladder is the only problem, transurethral resection should be done, and repeated if necessary.
4. As soon as any unfavorable clinical trend occurs, such as pain or a downward trend generally in any way, castration should be done.
5. When castration has lost its effectiveness or if it has not been effective at all, the administration of estrogens should be employed.
6. Pituitary irradiation may be used in the event of unfavorable response.
7. When for any reason bilateral adrenalectomy does not seem warranted, the administration of cortisone should be instituted.
8. Bilateral adrenalectomy with adequate metabolic support, and
9. Surgical removal of the pituitary should be performed if agreed upon by the patient and his physician.
10. Radiation of very painful areas for the symptomatic relief of pain may be done.
11. Prefrontal lobotomy is rarely indicated for the relief of pain.
12. The injection of radioactive gold into the

prostatic malignant tissue, both suprapubically, transvesically and transperineally may be considered.

13. General supportive measures are very important.

Complications Following Castration and the Administration of Estrogen

Certain complications occur during the chemical management of inoperable patients with prostatic cancer. Castration sometimes results in very bothersome vasomotor instability phenomena. This symptom is best treated by the administration of phenobarbital, dexedrine, or estrogens. In 1 case the administration of testosterone following castration proved to be ineffective. In rare instances nothing seems to be effective in controlling this symptom. The administration of estrogen may produce painful breast hyperplasia, thrombophlebitis, petechiae, edema of the genitalia, or varying degrees of general edema. If the breasts become too painful, the breasts may be removed surgically. If thrombophlebitis occurs, the administration of calcium gluconate may be effective, and often this type of therapy must be discontinued. If petechiae appear, calcium gluconate is effective. If edema occurs, reduction of the dose of estrogen with subsequent increase usually proves satisfactory.

Type of Estrogen and Dosage

The type of estrogen employed is not standardized. Estradiol, stilbestrol, progesterone, Tace, and methoxy bisdehydrodoisynolic acid are estrogenic-like substances. When one type of estrogen is not effective trial of others may result in finding one that is effective.

At Gallinger Municipal Hospital we observed the effectiveness of methoxy bisdehydrodoisynolic acid as an estrogenic substance and found it to be satisfactory. In view of the fact that it did not seem to be any more effective than others available and that the cost of production was high, it was not placed on the market for sale.

Tace has been reported very enthusiastically for use in the treatment of prostatic cancer. I am not prepared to substantiate these claims at this time. My policy has been to utilize the smallest dose that will be clinically effective. This has been found to be an individually determined amount.

Kearns[7] has relied upon the blood sedimentation rate to indicate the effectiveness of estrogenic treatment, and my observations have been to the effect that this test has been very reliable.

West, Malcolm and Rusche[8] presented a study of chymotrypsin and renin inhibitor enzyme balances as indicators of satisfactory dosage of estrogen in their management control.

Steroid Chemistry

Steroid chemistry has been vitally related to prostatic cancer, and to many metabolic processes in many different ways. Huggins' original theory concerning the relationship of the steroids to prostatic cancer was that "reduction in androgen content produced atrophy of the malignant prostatic epithelial cell." He demonstrated that the androgen content in the human could be reduced for varying periods of time by castration or by neutralization through the administration of estrogens. The steroids are supposedly elaborated by the gonads, the adrenals, and the placenta, and are stored and metabolized to an appreciable degree in the liver. It had been thought that the key compound in the elaboration of steroids was cholesterol.

Bloch and Rittenberg[9] have recently demonstrated that acetates are involved in the elaboration of cholesterol. This observation along with many others has proved that proteins, carbohydrates, fats, enzymes, vitamins and endocrines may be elaborated in the chemical economy of man in varying degrees in different individuals. The testicles produce 9 steroids, the ovaries 4, the placenta 3, and the adrenal 28. Forty-six steroids have been identified in the urine. The pattern of these substances has been studied by quantitative chemical analysis of the urinary content at Memorial Hospital in New York.[10] These analyses are obviously open to error. In view of the fact that renal metabolism which results in the production of urine is very complex, the steroid pattern in the circulating blood may be accurately determined only by analyses of the blood itself. This is now being done to some extent by Calver[11] at the Bethesda Naval Medical Center and by the Worcester Foundation for Research in Biology.

It has been observed that androgens or estrogens relieve mental depression in either sex. Vasomotor instability in both sexes responds satisfactorily to their use in most cases. Psychogenic amenorrhea has been reported by Reifenstein[12] to be accompanied by decrease in the urinary excretion of 17-ketosteroid. British neurosurgeons have observed that impotent patients on whom they performed prefrontal lobotomy experienced a resumption of potency and an increase of 17-ketosteroid from zero to normal value. Stress and anoxemia produce adrenal secretion of cortisone through hypothalamic action. Testosterone is anabolic in so far as muscle tissue metabolism is concerned. Patients suffering from senile dementia sometimes recover when testosterone is given. Testosterone favorably influences breast cancer in the female in some cases. Testosterone has rejuvenated and made winners of old race horses. Unfreshened cows will lactate when given stilbestrol. Diabetes is favorably influenced by the administration of estrogen or by castration. Patients who suffer from rheumatoid arthritis are spectacularly relieved and inflammatory tissue changes have proven reversible following the administration of cortisone or ACTH.

In the field of infectious inflammatory lesions instant relief of fever and inflammation occur following the administration of cortisone or ACTH. In 2 cases in which acute, profound, infectious complications following surgery appeared certain to result in death, rapid recovery occurred following the administration of cortisone. Rapid rehabilitation of a narcotic addict following the removal of narcotics has been observed in 1 case in which cortisone was given along with the removal of the narcotic. These are some of many clinical phenomena related to steroid patterns.

Grayhack and Harris,[13] of the Brady Urological Institute at Johns Hopkins Hospital, presented a paper entitled "A Method of Establishing Portal Drainage of Adrenal Venous Blood in Dogs," with metabolic studies. Liver selectively inactivates androgens. Life-sustaining adrenal steroids are not completely inactivated. Dogs have survived this procedure. Electrolyte and carbohydrate metabolism remain relatively normal. The possible value of this animal research involved the possibility of removing the right adrenal and anastomosing the splenic and left renal vein in man.* In the event that this procedure is feasible and successful, man may possibly live without specific maintenance routines. Here is another example of the value of animal research in the advancement of medical science.

Latimer[14] demonstrated renal hyperplasia following the administration of testosterone, with increased renal function.

Shorr[15] demonstrated that the administration of estrogens increased citrate excretion from the kidneys and indirectly prevented renal calculus formation. Oxalate and uric acid excretion in urine are definitely related to stress. Jeghers[16] has summarized endogenous and exogenous oxalate metabolism and called attention to the organic acid metabolism of acetates, citrate, malates and oxalates. Steroids are probably related to this phase of metabolism.

Selye,[17] who has been a profound theorist and researcher of the steroids, in both animals and man, has presented the interrelationship of pituitary adrenal steroid reactions in many of its complexities. He has observed that when estrogens are given to females a decrease in urinary estrogen excretion sometimes occurs. He has noted that small doses of testosterone decrease fertility in so far as spermatogenesis is concerned, whereas large doses enhance spermatogenesis. He has demonstrated the multiple specificity effect on genital tissue cells.

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* Since this address was given two patients have been operated on, one by Dr. William Wallace Scott, of the Brady Urological Institute, in Baltimore, and another in San Francisco, referred to recently in the press.

Kendall,[18] who has led in the field, has observed that only 4 of the 28 steroids elaborated by the adrenal have been demonstrated to be metabolically effective clinically. The chemical characteristic common to these 4 is that they are pregnenes, and they differ only by the number and position of hydroxyl and ketone groups attached to position C_{11} and C_{17}. This was determined by observing the effect of these steroids on adrenalectomized animals. It is significant that compounds A, B, E and F all were physiologically active in animals, whereas only E and F have been found to be effective in humans. This leaves further therapy open in so far as the other 24 compounds are concerned. The effect of these compounds involves the strong influence on carbohydrate and protein metabolism and a relatively mild effect on water and electrolytes. The field of clinical use of these compounds is relatively unexplored and broad. Perhaps of more than moderate interest is the value of minimal dosage over long periods in the field of collagen entities. Of considerable importance is the fact that clinical paradoxical reactions occur frequently enough to make it necessary to approach the management of each patient with a constantly vigilant observation of all trends. The administration of androgens and estrogens may produce either spectacularly favorable or unfavorable response to what we believe to be the same type of malignant clinical entity.

Tissue Culture

The field of tissue culture has been of considerable interest for some time. The reason for this interest is the ability to keep soil factors constant. In the human the innumerable variables are unrecognized and uncontrollable. Some years ago Carrel and Lindbergh maintained a heart muscle tissue culture vital until they became tired of maintaining it. Other workers have used connective tissue cultures of various kinds to observe the influence of certain chemical substances on their growth. The lack of reliability in the behavior of this type of culture in the past has resulted in a lack of confidence in observations in this field to an appreciable degree. Earle and Evans[19] and co-workers at the National Cancer Research Institute have been working in the field of tissue culture for some years and have succeeded in keeping a single connective tissue alive for 11 years. They have kept a tissue culture of the same nature which was produced from a single cell for a period of 4 years, to date. They feel that in the near future they will be successful in developing chemical media, the composition of which will be completely known, and which will allow tissue culture growth to be carried on in flasks similar to the manner in which bacterial cultures are grown now. This research modality will afford the facility of observing the effect of any chemical substance on individual cells. The obvious value of this field is the ability to observe cell behavior in a fixed media with completely controllable chemical soil factors. These conditions are not possible in any living animal.

Enzymes

An enzymatic aspect of prostatic carcinoma was first reported by Robinson, Gutman and Gutman.[20] They reported an increase in blood acid phosphatase in patients with skeletal metastasis secondary to prostatic carcinoma. They suggested that an increase in acid phosphatase levels was indicative of an advance in the extent of skeletal metastasis. These phosphatase levels were further described in cases of prostatic cancer by Huggins and his co-workers,[21] and their relationship to steroid changes discussed. These phosphatase levels are sometimes paradoxical. We find almost zero phosphatase levels in some of our most advanced cases.

Herbert reported that the acid phosphatase in blood from prostatic tissue is destroyed by alcohol.[22] The acid phosphatase produced by extra-prostatic tissues is alcohol-stable. If this is true it will make it possible to make a differential diagnosis between Paget's disease and osseous prostatic carcinomatous metastasis.

The field of enzymology has only recently developed the fact that enzymes are stable amino acid compounds which possess specific characteristics and produce specific chemical metabolic changes. The mitochondria of tissue cells have been found to consist of these amino acid compounds. Recently Greenstein[23] at the National Cancer Research Institute has observed that the mitochondria of the kidney cell are remarkably active metabolically probably to a greater extent than the liver cell. He is at present engaged in the technic of separating and identifying amino acids in the mitochondria of tissue cells by employing different centrifugation speeds on homogenized mitochondria. This research activity is in its infancy, but the potentialities are mathematically in the realm of near infinity. It is difficult at this time to speculate as to whether enzymes control steroid pattern balances or steroid pattern balances control enzyme patterns. It seems not to be unlike which was first, the hen or the egg.

Kelley[24] has presented a study of the human prostate by means of cytochemical staining methods. The object of his study was to throw further light on various intracellular metabolic processes based upon which the normal and abnormal biochemical reactions of the prostate could be clarified. He has been the first to study prostates with 5-nucleotide and adenosine triphosphatase stains. The freeing of phosphate bound energy is very important in metabolism. The smooth muscle of the stroma, the nuclei of both normal and abnormal epithelium, fibrous connective tissue and secretions of the prostate contain demonstrable concentration of 5-nucleotidase. The phosphate liberated by the adenosine triphosphate group of enzymes and substrates is assumed to take part in the phosphorylation of fructose and hexose monophosphates. This furnishes energy for the metabolism of sperm. Gomori demonstrated the distribution of acid phosphatase by his stain, which stains the acid phosphatase black.[25]

CYTOCHEMICAL ANALYSIS

Ability to demonstrate the pattern of distribution of many chemical substances in the individual cell by chemical staining technics is another very promising field in metabolic research. The acid phosphatase as demonstrated by Gomori,[25] the 5-nucleotidase, glycols and carbohydrates by Kelley,[24] mineral distribution by incinerative technic, phosphorescence, etc., by many others, make up an appreciable research activity.

Finkle,[26] by moving the kidney to the surface of the body in dogs, has been able to do biopsy studies of tissue following injections of laked blood. If this same technic could be used and a stain to identify histamine carried out, we might find to what extent histamine is related to lower nephron nephrosis and shock.

VIRUS

In the field of virus and its relationship to malignancy it would seem that we should attempt to establish the chemistry of virus rather than to be content with the fact that virus is present. At this time it is impossible. One of the most noted virus malignant entities has been that of Rous's chicken sarcoma. This specific virus has been recognized repeatedly over the years. At the present time there is activity in producing virus strains which it is hoped will have the property of destroying malignant disease in the host as a natural biochemical reaction.[27] Speculating on the potentialities in this field, it would seem that the ultimate objective is to have the human body stimulated to elaborate its own malignancy-destroying chemicals within itself not unlike vaccine for smallpox.

RADIOACTIVE ISOTOPES

In the radioactive isotope field it is now possible to engage in a very broad field of metabolic research by this newly acquired ability to tag individual atoms so that they may be identified following metabolic changes.

In this field there have been innumerable studies carried on, and many new ones are now being engaged in. My previous references to Bloch[9] is an example of the tracer method of biochemical research. In addition, in this field we have the use of radioactive isotopes in therapy and in the field of diagnosis and innumerable laboratory procedures. An example of the therapy field is the work of Flocks,[28] in which he has used radioactive gold. Another example is that in which radioactive iodine has been used in thyroid disease as a therapeutic agent.

Mulry[29] at the U. S. Naval Medical Center has used P_{32} which localizes in osseous tissue containing metastatic cancer. In this way he has been able to recognize areas of osseous involvement before they have become roentgenologically evident. In 1 case this material resulted in a moderate degree of relief from pain in regions of osseous metastasis.

DISCUSSION

The place of adrenalectomy is in the process of observation. In a conversation with Dr. Huggins he stated that he has done over a hundred bilateral adrenalectomies and is now doing them only in patients with prostate or breast malignancy. The breast patients respond the best so far. He is able to predict which of the breast patients will respond satisfactorily by microscopic examination of the breast tumor. He cannot do this with the prostate patients.

With the current available chemical research modalities the field of chemical research has become so complex that the degree to which research may be engaged in is dependent only upon the financial resources and trained research workers made available as time goes on. In so far as relativity in this field is concerned in clinical medical practice, the steroids appear to be the most practical as therapeutic agents. At this time it seems reasonable to believe that in surveying and appraising relative value in this field it is so complex and the mathematics involved so great, that it is not possible to determine what relativity actually is.

In so far as the eventual control of malignant growths is concerned the following fact is comforting. In numerous cases patients who have been suffering from apparently hopeless advanced malignant processes have been cured as a result of the inherent metabolic processes of their own.[30] This fact gives reasonable encouragement to those who see fit to engage in research activity in metabolic chemistry.

It can be stated that the management of prostatic cancer has resulted in an extension of life expectancy of not less than 2½ years. A comment on general attitudes toward cancer seems appropriate. We have so many types of chemical treatment available which maintain satisfactory general physical functioning that the fact that a malignant process has not been destroyed is not as important as it has been considered to be. If one can live out a reasonable expectancy the fact that it was done carrying a malignant disease should not be unsatisfactory.

In commenting on this subject, one of the most morale-destroying things a physician may do is to tell a patient that his condition is hopeless. In view of Rohdenburg's observations there is always a remote possibility of spontaneous cure.[30]

SUMMARY

1. Data are presented which provide vigorous support for the necessity of the continuation of animal research if medical science is to advance at a reasonably rapid rate.

2. The current rationale of the chemical management of prostatic cancer is presented.

3. The relativity of chemical factors involved in prostatic cancer and metabolism in general is

seen to be kaleidoscopic and mathematically complex almost to the degree of infinity.

4. At this time steroids provide a most effective metabolic control.

5. From a mathematical chance standpoint innumerable spectacularly effective chemicals are almost certainly unrecognized and their potentialities unexplored.

6. The most encouraging aspect of our effort to discover the chemical factors involved in the control of cancer is the fact that many instances of spontaneous disappearance of advanced malignant tumors as the result of the human hosts' own metabolic processes have been observed.

7. Those who engage in research involving the complexities and mathematically stupendous potentialities in the chemistry of metabolism cannot help but be impressed with the omnipotence of God and of the relative insignificance of the human mind.

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SOME PROBLEMS OF THE "CRIMINAL INSANE" AT SAINT ELIZABETHS HOSPITAL*

WINFRED OVERHOLSER, M.D., Sc.D.
Superintendent, Saint Elizabeths Hospital, Washington

ONE of the phases of the growing interest of the public in psychiatry is in the relationship of that specialty to dealing with persons who are accused or convicted of crime. Although this interest is widespread it has been focused in the District of Columbia recently by a series of articles in the local press. For instance, about a year ago, and again more recently, newspaper comment was made to the effect that the crowding in St. Elizabeths Hospital is such that it is necessary at times for prisoners to wait in the District Jail for an uncertain period after they have been found to be mentally ill. Another series had to do with the manner in which possible mental illness has been utilized in the local courts as a means of either postponing or evading trial or conviction on charges of crime. Finally, a recent decision of the Court of Appeals having to do with a "sexual psychopath" was given considerable space both in the news columns and editorially. For these reasons it appeared desirable to your Chairman that a statement might be presented to this Committee in order, perhaps, to clarify some misunderstandings.

I have said that there is a growing interest in psychiatry, and that is true; yet it is a fact that about no subject in the field of medicine are there so many current misconceptions, some of which are shared even by the better educated in our society. St. Elizabeths Hospital was established as The Government Hospital for the Insane and opened in 1855 for the care of the insane, as the mentally ill were then generally called, of the Army, Navy, and District of Columbia. Its name was officially changed in 1916 to conform to a local custom of long standing. It has been and still is the only institution in the District of Columbia for the more than temporary care of the mentally ill. As early as 1887 special facilities were established for those male patients of the hospital who required maximum security, and this section of the hospital was named Howard Hall after John Howard, the great English prison reformer. It had an original capacity of 120 patients, but later on the rooms which were originally designed for housing employees were taken over and some of the dayrooms were turned into dormitories, so that at present the nominal capacity is 175.

Approximately 120 patients are cared for in single rooms, although it should be pointed out that at present less than half of the patients in the entire 175 are locked in their rooms at night. The security of Howard Hall was increased in 1913, following several escapes, by the erection of a 24-foot wall about 50 feet away from the building which not only provides great security but gives likewise ample space for outdoor recreation. In 2 of the 8 wards in the building no patients are locked in their rooms at night. This includes Howard Hall 6, which was described in the recent decision of the Court of Appeals just referred to as a "place of confinement for the criminal insane" in which there are "many wild and violent insane persons." Actually, Howard Hall 6 is the "privilege ward," on which our convalescent and well-ordered patients are cared for. Some of the patients have their own radios or television sets, and the atmosphere is that of quiet and good order.

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* Remarks before the American Bar Association's Committee on Improving the Administration of Justice, March 19, 1953, in Washington, D. C.

The policy as to Howard Hall is that it is a section of the institution which provides against the escape of patients. The patients, all male, who are confined in Howard Hall are not exclusively those charged with crime or convicted of crime. Patients in other parts of the hospital who, if they escape, might cause serious annoyance or injury to the public or who are a potential danger to other patients, even though there are no charges pending against them, may be transferred to Howard Hall. As of March 1, 1953, of the 172 patients in Howard Hall, 39 had no criminal charges on admission, and 9 more had had charges dropped—48, that is, or almost 28 per cent.

Howard Hall has no separate entity, and the decision as to the patients who are cared for in the Hall, just as in other wards, is entirely a matter of the internal administration of the Hospital. Patients of all classes who are sent to the Hospital are committed for treatment, if committed at all (a considerable number are voluntary patients), with no specification as to any section of the institution. No statute dealing with commitments makes any such particularization. The general policy, however, is to admit to Howard Hall all male patients against whom criminal charges are pending or who are under sentence. This is done merely in order that assurance may be given that the patient can be returned to the court if the court demands him. He may, indeed, be charged with drunkenness or some very trivial offense, and in such a case it is quite likely, unless he is a serious menace in spite of the triviality of the charge, to be transferred to another ward very shortly. Many of the patients in Howard Hall, in other words, are there for relatively short periods of observation and certainly the bulk of them are far from being "hopeless" or "violent."

Until 1946, although there were some recreation and occupation in the Hall and although a certain amount of psychotherapy was provided, the atmosphere was essentially a restrictive one. Since that time, however, a much more active program of therapy has been introduced, both group and individual. More occupational therapy has been provided, and, indeed, a tradition was broken at that time by arranging to have a woman occupational therapist in charge. A journal has been published by the patients for several years, 2 talent shows have been organized by the patients, they have their own band, they have held field days, and on several occasions they have had softball contests with teams which came in from outside the Hall. Motion pictures are provided, and religious services are held regularly. The atmosphere, in short, is much freer than it was formerly, and the number of complete discharges and transfers out of the Hall to other wards has been very much increased. All of the patients may correctly be said to be under treatment.

Prisoners may be admitted from the District Court of the United States, from the Municipal Court of the District of Columbia, or from other District Courts of the United States for purposes of observation pending determination of their mental condition. They may be admitted instead as having been found mentally unfit to plead or advise with counsel. Prisoners who are found to be suffering from mental disease while serving sentence may be transferred from other Federal institutions. Until 1946 military prisoners likewise were received, but this source of admissions was stopped when by a Reorganization Plan of 1946 the use of St. Elizabeths Hospital was denied to the Armed Forces. In 1948 the number of legal classes of persons eligible for admission under criminal proceedings was increased by passage of the so-called Miller or Sex Psychopath Act. This type of legislation is of considerable interest, and I hope that some time I may have the privilege of discussing somewhat more at length before this Committee the principles and practice of dealing by the law with what an English criminologist has referred to as the "non-sane, non-insane" offender.

Suffice it to say at this point that "sexual psychopath" legislation has been enacted now in about 15 states. It is a recognition of the fact that there is a borderline state between what the law still denominates by the old term "the insane" and those persons who are completely sane; in other words, that there is a group which is mentally deranged to an appreciable degree and in need of psychiatric care rather than the routine penal treatment. The definition given in the Miller Act speaks of a person "not insane who by a course of repeated misconduct in sexual matters has evidenced such lack of power to control his sexual impulses as to be dangerous to other persons. . . ." To the psychiatrist, at least, any person who is unable to control his impulses to the extent of being dangerous should be considered mentally deranged, whether or not the law calls him insane! Whether the "sexual psychopath" is mentally disordered or "insane" is a matter largely of degree, and one which involves legal semantics more than psychiatry. The sexual psychopaths are committed for an indeterminate period of treatment, just as are "the insane." Congress in enacting the Miller Act denominated St. Elizabeths Hospital, a mental hospital, as the place of treatment, merely stating that the individual should be committed to St. Elizabeths Hospital and confined until released in accordance with the Act. Nothing was said in the Act as to special quarters, no special appropriation was made for the care of the group, and the hospital had to devise its procedures as it went along. The whole field of "sexual psychopathy" is largely uncharted, with much room for further knowledge. It is probably a fact that St. Elizabeths Hospital is carrying on a more active and successful program of treatment with this difficult group than any other similar institution. Presumably all of the patients in any good mental hospital are receiving psychiatric treatment. That is true of persons whether they are sent to St. Elizabeths Hospital as civil insane, as criminal insane, or as "sexual psychopaths."

Some interesting facts emerge from a study of the admissions of prisoners during the past 10 years. In 1943, for instance, 24 District prisoners, 3 United States prisoners, and 1 military prisoner were admitted, or a total of 28. In 1948, a year in which there were no military admissions, we received 49 District prisoners and 7 United States prisoners, or a total of 56. In the calendar year 1952 the number rose to 56 District prisoners and 62 United States prisoners, a total of 118. So far as I have figures, which have been prepared for me very carefully and completely by Dr. Francis J. Tartaglino, the Clinical Director in charge of the division in which Howard Hall is administered, there are only 4 patients who have been acquitted of charges on the ground of insanity; that is, with the exception of those 4 all of the prisoners admitted were awaiting trial or had become mentally ill while serving sentence. The significance of the increase is not wholly due to an increase in crime or to an increase in the population of the District. It appears to me that the figures indicate partly the alertness of courts to see to it that the right of a mentally ill prisoner not to undergo trial while mentally ill is preserved, and also the alertness of some defense attorneys, who are ready to utilize the possible delays even in doubtful cases.

I said earlier that patients may leave Howard Hall by one of two routes. They may be returned directly to the court or, if no criminal charges are pending, to the community. They may, on the other hand, although not considered well enough to be released from the Hospital, be thought suitable to be transferred to other wards of the institution. In 1937 there were 14 transferred and 17 discharged, or a total of 31. In 1952, 15 years later, 71 patients were transferred from Howard Hall and 64 discharged either to the court or to the community, depending on their legal status. As of March 1 there are 29 prisoners with charges still pending who are on wards outside of Howard Hall. It may be mentioned here that of the 118 prisoners who were received in 1952, 37 have been discharged from the Hospital after an average stay of 133 days. These figures reflect the increase in therapeutic activity in the Howard Hall program.

I alluded earlier to the new load which has been laid on the institution by the enactment of the so-called sexual psychopath legislation. The numbers have not been great. Up to February 28, 60 had been admitted since the law became effective in the summer of 1948. In 1949, 15 were admitted, and in 1950, 30, but in 1952 only 4 and during this year only 1 were admitted. The popularity of the Act seems to be falling off. Of these 60, 29 have been discharged and 31 are still on the rolls, only 12 of those, however, remaining in Howard Hall. Of those who have been discharged it is pleasing to note that none, as far as we can learn, has since been arrested for a sex offense. Needless to say, those sexual psychopath patients who remain in Howard Hall are patients who are highly uncoöperative with treatment or who otherwise have a poor prognosis as to fitness for release. Some of them are assaultive and potentially dangerous. I may add that if any of them object to the propinquity of the committed "insane," the sentiment is not entirely without reciprocation. To care for the sexual psychopaths all in one ward, however, would add administrative problems which are better left undescribed.

The fact has already been mentioned that for over a year it has been necessary to delay the admission of prisoners from the District Jail who had been found to be mentally ill until space is available in Howard Hall. This wait has averaged 27 days, and in 23 cases it was over 50 days. At present there are 10 such prisoners in the District Jail. It is most unfortunate and indeed highly improper that mentally ill persons should be kept in a penal institution, but in fairness to the patients now in Howard Hall and to the employees who care for them further crowding is wholly impossible. There is, therefore, a need for a larger maximum security facility of the Hospital which should accommodate both sexes. It must be borne in mind that there are female criminals or women at least accused of crime who are or become mentally ill; at present there are 33 such in St. Elizabeths Hospital, who must be cared for in wards with other patients. The annual number of female prisoner admissions, until 1949 only 10 or less, has more than doubled since then—25 in 1950, 19 in 1951, and 21 in 1952.

I am glad to say that at the present time Congress is considering a request for funds to provide plans for a new maximum security section of St. Elizabeths Hospital. We hope that we may build a satisfactory building with a capacity of about 375. As the District grows, and as the contributions of psychiatry to criminal law and procedure become better understood by the courts and by the public, we may expect an increasing load of admissions, at least for observation, if not for prolonged care. There will be some patients who may remain for a long period, but as psychiatric therapy continues to grow in effectiveness we may well expect that the turnover will increase also.

INCIDENCE OF PINWORM AND ASCARIS INFESTATION IN NEGRO CHILDREN IN THE WASHINGTON AREA

VERMELLE C. KELLY, M.D.*
Greenville, North Carolina

ROLAND B. SCOTT, M.D.
Professor and Head of Department of Pediatrics, Howard University School of Medicine; Chief Pediatrician, Freedmen's Hospital

FROM a review of a large number of publications during the last 10 years,[1-18] it has been observed that *Enterobius vermicularis* and *Ascaris lumbricoides* are sufficiently common parasitic infections in children to justify special consideration by pediatricians and general practitioners. The preventive and public health aspects of these infections are of special importance.

The Pediatric Service of Freedmen's Hospital has made a study of the incidence of these diseases in children between the ages of 1 and 12 years during the period extending from October 1950 to May 1952. The children were all Negroes and came from the metropolitan area of Washington, D. C., which included adjoining counties of Maryland and Virginia.

METHODS AND RESULTS

Three anal swabs per child were made throughout the survey, Jacob's modification of Graham's method being used, together with 3 stool examinations by the zinc flotation centrifugal technic. The anal swabs and stool examinations were done on alternate days. The anal swabs were taken by a physician before the morning toilet or meal.

Of the 200 children examined, 79 or 39.5 per cent were from the District of Columbia, 43 or 21.5 per cent from Virginia, and 78 or 39 per cent from Maryland. Of the 7 cases (3.5 per cent) positive for Ascaris, 5 were males and 2 females. One male and 3 females were positive for Enterobius.

Routine hemograms were done in all cases. No significant difference in the hemoglobin values or eosinophil counts was found in the positive and negative groups. The symptoms usually attributed to helminth infestation, such as anorexia, malnutrition, irritability, enuresis, insomnia and anal pruritus, bore no special correlation to the presence or absence of parasitic infestation.

DISCUSSION

The first epidemiologic studies of *Enterobius vermicularis* with the use of the NIH swab were reported by Cram and associates[19] in 1937 in Washington, D. C. Since then many surveys have been conducted in the United States and foreign countries. From data available, it has been established that *Enterobius vermicularis* is more prevalent among children of school age (6 to 18 years) than adults. This parasite surmounts all social barriers, being found at all economic levels. Several surveys involving both white and Negro children have disclosed a lower incidence of infestation in the Negro race. The reasons for this difference in racial incidence are not clear.

Maddux[20] examined 474 individual stools from

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* Former Resident in Pediatrics, Freedmen's Hospital, Washington, D.C.

Negro children between 1 and 14 years of age at Provident Hospital Children's Clinic, Chicago, Illinois (November 1934 to June 1936). He found only 2 subjects positive for pinworms and 4 for Ascaris.

Hospitalized children, when compared with subjects from schools, clinics or private homes, seem to show less infestation with pinworm. Since personal hygiene plays an important role in pinworm infestation and detection, hospital procedures, such as enemas, rectal temperatures, routine washing and bathing, may prevent the detection of some positive cases through the temporary removal of ova from the usual sites of detection. This may account in part for the relatively low incidence in our survey, since many of the children in this study were hospitalized.

Combining statistics from several surveys from the general population (adults and children) in Washington, D. C., Cram[21] found an incidence of pinworm infestation of 41.9 per cent in 2,582 whites compared to 15.5 per cent in 789 Negroes. In children 2 to 12 years secured from nursery schools and summer camps (1939) she found 33 per cent in 209 whites compared to 19.8 per cent in 131 Negroes.[22]

Our present finding as to incidence is much lower than that of Cram. We offer the following explanation in part for the discrepancy:

1. Many of our children were hospitalized and hence subjected to routine "cleansing procedures" such as bathing, enemas, etc., whereas Cram's subjects were from nursery schools and camps.

2. Cram's survey included children from summer camps, and it is possible that the summer humidity (moisture) may have enhanced the infestation and incidence. Our study covered all seasons of the year.

3. It is possible that during the past 14 years an actual decrease in this type of infestation has occurred in the Washington area.

It was surprising to us not to find a higher incidence of Ascaris infestation, especially in the children from adjacent counties. Infestation with this parasite is dependent to a large extent upon environmental and soil pollution. Recent improvement in local sanitation facilities in this area probably accounts in part for the relatively low incidence of infestation.

Apparently American Negro children are also less susceptible to Ascaris infestation than are white children. The basic reasons for this apparent difference in racial susceptibility to certain intestinal parasites are not clear. In this regard it may be mentioned that certain other diseases, such as poliomyelitis, Sydenham's chorea, acute leukemia, brain tumors and pediculosis capitis, are statistically less common in Negro children than in white children.

SUMMARY

Two hundred Negro children from Washington, D. C., and from nearby counties in Maryland and Viriginia were examined for pinworm and Ascaris. They ranged in ages from 1 to 12 years.

An incidence of 7 cases (3.5 per cent) for Ascaris, and 4 cases (2 per cent) for pinworm was found. Reasons for this comparatively low incidence of intestinal parasitic infestation are discussed.

The authors wish to acknowledge their thanks to Mrs. Vivian W. Newton and Mrs. Anne Cole for their technical assistance in examining specimens for the detection of these parasites. Dr. Hildrus A. Poindexter, Medical Director, U.S.P.H.S., gave helpful suggestions in the preparation of the manuscript.

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ALVEOLAR CELL CARCINOMA OF THE LUNG

Review and Report of Two Cases

GEORGE WILLIAM WARE, M.D.*

Instructor in Thoracic Surgery, Georgetown University School of Medicine

ALVEOLAR cell carcinoma is a malignant multicentric tumor of the lung which arises in the alveoli and causes death by local obstruction to normal respiration or by distant metastases.

This tumor is described with varying names in the literature; it is called alveolar cell carcinoma[1-4]; pulmonary adenomatosis[5-19]; alveolar cell tumor[20-24]; bronchiolar cell carcinoma[25, 26]; and carcinosis.[27]

As may be seen by the above, adenomatosis is the most popular name. Such a term is inadequate, however, because it does not indicate the malignant nature of the process. Although the histologic appearance is benign, the clinical course is definitely malignant. Hence the tumor should be so designated.

The postulation of a multicentric origin should not be objectionable, since such a possibility has been proved in papillomata of the bladder and polyposis of the colon.[2]

SITE OF ORIGIN[28, 29]

Obviously, before one discusses alveolar cell carcinoma, it must be decided whether or not the alveolus has a cellular lining from which a carcinoma may arise. The monograph of Miller[30] offers a convenient starting point. He states that Thomas Addison first described an epithelium in the alveolus in 1843. Miller reviews the pertinent literature and recognizes the difficulty encountered in attempting to dissect an epithelium free from the alveolus. Such difficulty is usually interpreted as proving lack of an epithelium. Miller approaches the problem from a different angle by observing the changes in diseases. He studies the lesions seen in the lung of a patient with heart failure. Here there is an outpouring of fluid which leads to edema of the epithelium, which is thus dissected away from the alveolar wall. Various stages can be illustrated from edema to actual separation. Miller concludes, "The evidence points to a continuous epithelium lining the pulmonary alveoli."

Studies in other pathologic conditions are important also. It has been recognized that in the adult lung certain stimuli will cause "abnormal proliferation, hyperplasia and metaplasia,"[5] e.g., chemical pneumonia and lipoid pneumonia. Chronic anoxia seems to be the common factor. Cuboid or mucus-producing columnar epithelium of the alveoli is seen.

Experimentally, similar changes may be seen. By the use of various metals or tar derivatives, alveolar tumors which resemble those under discussion can be produced. These tumors are multiple and have no connection with the bronchus.[1, 5, 24, 31, 32]

It appears, then, that most authors believe that the alveolus does have a continuous lining which can proliferate under certain experimental and pathologic conditions. There are some who disagree with varying degrees of fervor. Neubuerger[24] thinks that the tumors arise from the alveolus which does not have a continuous lining in the adult, and that the origin of the tumor is mesenchymal cells which normally exist in the alveolar septum. These cells have been described by Maximow and Bloom[33] and labeled "septal cells." Neubuerger concludes that such cells, because of their multipotential nature, may under certain pathologic conditions produce an alveolar lining with epithelium-like cells and under other circumstances produce alveolar cell tumors.

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* Formerly Chief of Thoracic Surgery Section, Valley Forge Army Hospital, Phoenixville, Pa.

Herbut[26] disagrees violently with the previous theses. It is his contention that the origin of the tumor is from bronchiolar cells. According to this view, what is regarded as alveolar cell origin is due to the downgrowth of bronchiolar mucosa. He thinks he has verified this by a careful study of serial sections showing transition of bronchial mucosa to tumor in cases which others would call alveolar cell carcinoma. Herbut has also examined lungs in various chronic pulmonary diseases, including 60 cases of bronchiectasis. As regards the alveolar lining cell seen, he states, "These lining cells were seen to originate in the mucosa of the bronchioles." He found no evidence that the alveolar epithelium came from "septal cells."

This author holds a unifocal origin which begins in the bronchiole and then extends to the alveolus. The alveolar septum merely acts as "a scaffolding on which the cancer cells grow," and the multiple sites in reality are due to metastases by the bronchial and bronchiolar lumen.

Hutchinson[8] has recently published a review on this subject. The basis of the work was the examination of serial sections from a lobectomy specimen. After such study he concluded that the tumor had an extra-alveolar origin and that aerial metastases were the cause of the "multifocal origin." Potts and Davidson[32] have presented an interesting case which was diagnosed antemortem as alveolar cell carcinoma. Autopsy seemed to show that the patient actually had an adenocarcinoma which had metastasized and simulated alveolar cell carcinoma.

The disease jaagsiekte (jagziekte) is always discussed in connection with this tumor.[34] It occurs in sheep. Jaagsiekte is the name used in South Africa, while "progressive pneumonia" is the term used by sheep men in this country. The illness is highly contagious, and its clinical course resembles alveolar cell carcinoma in humans. One characteristic of note is the profuse production of frothy sputum. Jaagsiekte is believed to be viral in origin and spread by respiratory contact.[35]

Bonne[27] in 1939 described a case which he termed "carcinosis" and called attention to the similar histologic picture seen in jaagsiekte. Such a report stimulated speculation and investigation which continues to the present. Inoculation of animals with preparations from human cases has been fruitless.[20, 21] History of contact with sheep was sought in human cases. Close contact[23] and casual contact[15] have been extremely rare. No cases of transmission from human to human have been reported. It would seem that there is no connection between jaagsiekte and alveolar cell carcinoma.

PATHOLOGIC FEATURES[36]

Two gross forms are recognized, the multiple or nodular and the diffuse or pneumonic. Malassez in 1876 first described the multiple or nodular variety.[24] Here the size of the tumor varies from a few mm. up to 8 cm. in diameter involving both lungs. Intervening lung appears normal. The nodules are irregular and soft. Pleural involvement is common.

Musser[37] in 1903 reported the first example of the diffuse or pneumonic type. In this instance a lobe or entire lung may be involved so that the area resembles "the grey hepatization of pneumonia." It is believed that this variety probably results from the coalescence of nodules in the first type.

Both varieties may coëxist as Musser originally noted. Because of this, objection has been raised as to whether the terms should be continued. It would seem warranted to continue them since they have excellent descriptive value and in these forms are seen by the clinician.

The pleura may be invaded; if so, pleural effusion is often present.

Metastases are seen in approximately half the cases. They are usually to the peribronchial nodes or to the ipsilateral lung.

A characteristic histologic appearance is common to both types. There are multiple layers of columnar cells lining the alveoli. There is a tendency to papillary projections filling the alveolar space. The cells may become detached and fill the center of the alveolus. Mucin-producing columnar cells are seen in perhaps 50 per cent of cases.[38] Mitoses are usually regarded as uncommon, and the tumor appears histologically benign. The bronchi are not involved except late and then by invasion.

Clinical Features

The tumor is uncommon.[39] Hutchinson[8] has estimated that 100 cases have been reported. Watson and Smith[38] found 33 proved cases in a review of 1,585 lung neoplasms seen at Memorial Hospital in New York. Good and associates[21] report that 12 cases have been treated at the Mayo Clinic.

The incidence in women is higher than in bronchogenic carcinoma. Seven of the Mayo Clinic cases were in women. Twenty-five per cent of the Memorial Hospital cases were in women. Davis and Simon[20] report 5 cases, all in women.

Cough is the most common symptom and is usually the first to appear. It is nonproductive at first but later produces varying amounts of sputum. The sputum may be mucoid or purulent, occasionally blood-streaked. In certain instances it is practically diagnostic. Here it is watery and profuse, up to 3,500 c.c. in a single 12-hour period. This type of sputum, copious and frothy, suggests that seen in pulmonary edema. Great stress previously was placed on this type of sputum, but it should be realized that it is present in a minority of cases.

Dyspnea is frequently present and is out of proportion to the clinical illness and the X-ray appearance. Cyanosis is associated with more marked degrees of dyspnea. Chest pain is frequent, especially in the pneumonic variety. When present it is a major complaint.

Weight loss, fever, anorexia, and malaise are systemic symptoms which have been noted.

The symptoms are of greatest value in directing attention to the pulmonary system.[9, 10, 16, 18, 20, 21, 22, 24, 38, 40, 41] The most helpful symptoms are severe dyspnea and, when present, large quantities of sputum. Some cases have been detected in an asymptomatic state by use of the survey chest film.

Physical signs when present are the customary findings of consolidation or fluid. Roentgenologic examination[10, 11, 18, 21, 38, 40] (as does the gross appearance) reveals the 2 general types, which may blend. The nodular is the more common. The tumor masses are widespread. They resemble metastases but are less well delineated and are larger and less dense. The lesions may be 4 to 5 cm. in diameter. In 2 cases cavitation was present.[18] In the diffuse variety a homogenous density resembling lobar pneumonia, bronchogenic carcinoma or tuberculosis is seen. Atelectasis is uncommon. The appearance in X-ray films is not diagnostic but should arouse suspicion.

Endoscopic examination is usually negative.[10, 14, 21, 38] Some nonspecific abnormality may be noted.[21] A tumor is visualized only in late cases. Confirmatory evidence of the diagnosis would be aspiration of profuse mucoid bronchial secretions, at times up to a pint at the time of examination.

Cytologic examination[3, 10, 21, 22, 38] of bronchial washings and sputum has recently been utilized with good results. Smith quotes Papanicolaou as stating, "The smear method of examination of sputum and bronchial washing has proved to be efficient in the diagnosis of terminal bronchiolar carcinoma. It has been noted that this tumor exfoliates profusely as compared with other types of bronchogenic carcinoma. In the cases studied, a large number of malignant cells were recovered. One of the more specific cytologic changes noted was the presence of multinucleated cells which are rarely seen in other types of carcinoma of the lung."

Aspiration biopsy[10, 38] has been used with success in the diagnosis of the pneumonic form of the disease. In Watson's series[38] 5 cases were so diagnosed.

TREATMENT

Irradiation[10, 18, 38, 41] has been universally fruitless. In the cases in which X-ray therapy has been employed, neither regression of the tumor nor palliation has been noted. Nitrogen mustard[3, 12, 18] has had limited use with results comparable to X-ray treatment.

It is difficult to recommend extirpative surgery in a lesion believed to be multicentric in origin. However, the dearth of other forms of therapy and the results of surgery would seem to warrant such recommendation. This is especially true since the pneumonic form may remain localized for long periods of time. Metastases may not be seen or be restricted to regional lymph nodes.

In the series of Watson and Smith[33] 16 patients had surgery. Ten patients are living, of whom 2 are well 5 years later. These authors point out that the resection rate in this condition is double that of bronchogenic carcinoma. Delarue and Graham[1] report a case treated surgically. The person remained well for over 4 years following lobectomy. Recurrence followed, and pneumonectomy was performed. The tumor was incompletely removed, but he remained well more than 5 years after the first operation.

Mayo Clinic surgeons operated on 7 patients. Two are living and well 2 years after operation. Two had recurrence 6 to 12 months postoperatively. Two died of cardiac complications in the immediate postoperative period. The final patient died of Hodgkin's disease. The authors[22] conclude, "Surgical resection of the affected pulmonary region is the only treatment of value at present. If patients are allowed to go without removal of alveolar cell tumor they will die of asphyxia, metastasis or obstructive pneumonia."

REPORT OF CASES

Case 1. M. G., a 69-year-old white woman, was admitted to Valley Forge Army Hospital on July 24, 1951. Her chief complaint was vomiting. The patient was a widow without family and had been living with friends. For 2 months prior to admission she had been having emotional difficulties with these friends. She was vehement in her condemnation of them. She was convinced that they were stealing from her, telling lies about her, and attempting to control her estate when she died. Because of these stresses, she stated that she lost her appetite and started to vomit. She denied all systemic symptoms other than mentioned. The history was difficult to obtain, because she was suspicious, emotional, cried without cause, and strayed from the questions asked.

Physical examination revealed questionable blurring of the left disc and vague shifting abdominal tenderness. Rales were heard anteriorly and posteriorly over the right upper lobe.

The white blood cells numbered 9,800 and the red blood cells 3,800,000, with a hematocrit of 39. The sedimentation rate was 41 mm. per hour. Urinalysis was normal.

A roentgenogram of the chest showed multiple small opacities in both lung fields (figure 1).

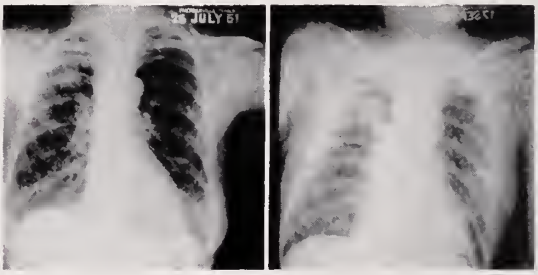

FIG. 1. Case 1. Films made on July 25 and September 17, 1951.

The initial impression was tuberculosis or metastatic carcinoma. Medical diagnostic tests were difficult to perform because of the lack of coöperation of the patient. She was convinced that such tests were unnecessary and were designed to punish her.

Bronchoscopy was negative, and bronchial washings did not reveal malignant cells. Gastric washings were repeatedly negative for tubercle bacilli. Bone marrow aspiration was also negative for tubercle bacilli. Radiographic bone survey was negative except for arthritis of the spine.

Total protein was 5.8 Gm., with albumin of 4.2 and globulin of 1.6. The blood urea nitrogen was 27 midway about the middle of the hospital course. As the hospital course progressed the patient's condition declined. Although alveolar cell carcinoma was considered, metastatic carcinoma was considered most likely. Because of her mental state as well as the onset of bilateral papilledema she was felt to have cerebral metastases. In September tube feedings became necessary. At this time she became very lethargic and developed fecal and urinary incontinence. In October she became comatose and dyspneic. She died on January 2, 1952, having lived more than 5 months by virtue of tube feeding and nursing care. Cough had been rare, sputum was not produced, and dyspnea was seen only late in the course of the illness.

Autopsy showed a small right pleural effusion of clear yellow fluid. The lungs had small diffuse nodules in all lobes. All were less than 1 cm. in diameter and on cut section were pale and soft. There was no bronchial involvement. Metastases were present in the liver, left adrenal and extensively in the brain.

"Microscopically the tumor was essentially similar in all its locations. It consisted of tall epithelial cells which grew on papillary stalks into cystic spaces. In the lung it lined the alveoli at the periphery of the tumor nodules. The tumor cells were fairly well differentiated and mitoses were only occasionally seen."

Case 2. J. W., a 44-year-old white man, was admitted to Valley Forge Army Hospital on November 14, 1952 with a chief complaint of pain in the right chest which began in mid-October. By the end of October the pain had become so severe that he sought medical advice. An X-ray film was interpreted to show pneumonia, and he was hospitalized. Physical examination was compatible with the diagnosis of pneumonia. The white blood count was 11,600; the hematocrit was 45; and the sedimentation rate was 29 mm. per hour. The patient was treated with aureomycin without response. A thoracentesis was productive of 500 c.c. of yellowish fluid. Culture of the fluid and sputum smears and cultures were all negative for tuberculosis. During the first week of this hospitalization the temperature ranged between 99 and 100°F. Because of failure to respond to treatment and the tentative diagnosis of tuberculosis, the patient was transferred to Valley Forge Army Hospital.

Physical examination at this station revealed a well developed, poorly nourished, white man who complained of severe right chest pain. There was limited respiratory excursion on the right; this hemithorax was tender on palpation. Physical signs of consolidation were present.

The white blood cells numbered 17,500 per cu. mm. of blood. The hemoglobin was 14.6 Gm. Urinalysis was normal. An X-ray film of the chest showed a pneumonic process and a pleural effusion on the right (figure 2).

The admission diagnosis was tuberculosis. Sputum examinations were negative for tubercle bacilli. Several thoracenteses were performed. The fluid was amber and negative on culture in each case. Bronchoscopy revealed inflammatory changes in the right lower lobe orifice. Biopsy showed only chronic bronchitis. Bronchial washing did not reveal malignant cells.

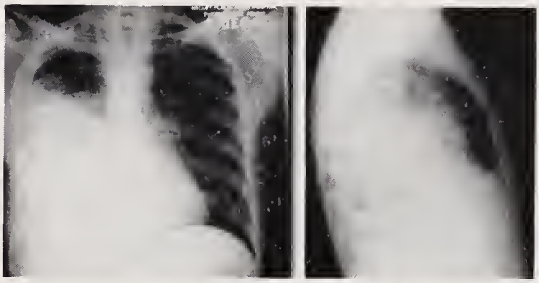

FIG. 2. Case 2. Films made on December 4, 1952.

The patient was treated with streptomycin and PAS. The patient became more febrile, lost weight, and dyspnea appeared; the chest pain increased. The sputum was mucoid and scanty. Because of these findings the diagnosis of tuberculosis was discarded and the patient considered to have alveolar cell carcinoma. Accordingly, a right thoracotomy was performed on December 29, 1952. Involvement of the pleura by a malignant process was found. In order to attempt to remove this process an extrapleural pneumonectomy seemed advisable. During performance of the procedure cure was seen to be impossible. There was gross involvement of mediastinal and carinal nodes and the diaphragm. The right bronchus was amputated and closed; pleura was not available for covering the stump. Examination of the surgical specimen revealed alveolar cell carcinoma.

Recovery following surgery was slow. The patient complained of dyspnea and weakness. On the twenty-sixth postoperative day he developed evidence of a bronchopleural fistula and died 7 hours after the onset of this catastrophe.

At autopsy the diagnosis of alveolar cell carcinoma was corroborated. There were metastases to the pericardium, diaphragm, liver, serosa of the small and large intestines, both adrenals, and the left lung. There was a small right bronchopleural fistula. The brain was not examined.

SUMMARY

A brief review of alveolar cell carcinoma has been presented. The tumor is considered malignant and to be multicentric in origin. The tumor originates from cells lining the alveoli of the lung.

Two clinical forms of the tumor exist—multiple or nodular and diffuse or pneumonic.

Signs, symptoms and X-ray picture have been discussed. Surgery is the only form of therapy which offers promise at the present.

Two new cases are added to the literature.

I wish to express my debt to Mrs. E. M. Holloway, Medical Librarian, Valley Forge Army Hospital, Phoenixville, Pa., and Miss Rae Desimone for aid in compiling the bibliography and the preparation of the manuscript

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ACUTE DISSEMINATED HISTOPLASMOSIS

Report of a Case Diagnosed by Needle Biopsy of the Spleen and Liver

JOHN T. ALEXANDER, M.D.

Chief Medical Resident, Georgetown Medical Division, Gallinger Municipal Hospital, Washington

FARHAN BAKIR, M.D.

Assistant Medical Resident, Georgetown Medical Division, Gallinger Municipal Hospital

HISTOPLASMOSIS was first described independently by Darling and Strong 47 years ago. The organism, first thought to be a protozoon, was not proven to be a fungus until 19 years ago. Only in more recent years has it become clear that human infection with *Histoplasma capsulatum* has a wider clinical scope than the rare, fatal, acute disseminated form long held to be its invariable manifestation.[1]

Not only is there gradually accumulating proof[2, 3] that the generalized form of histoplasmosis is not always fatal (there are at least 14 proven cases reported), but of greater significance is the evidence that a subclinical benign form of the disease may be widely prevalent in the United States. Extensive skin-testing studies have demonstrated a high degree of correlation between pulmonary calcification in nonreactors to tuberculin and positive skin tests for histoplasmin.[4, 5] This has been most striking in what appears to be an endemic area centered in the Lower Mississippi Basin, including Missouri, Ohio, Arkansas, Tennessee, Indiana and Kentucky.

Such evidence is largely circumstantial, but there are now several proven instances in which a clinically mild, primary pulmonary infection has been observed to evolve through the sequence of a small area of pneumonitis, with or without thin-walled cavitation, and after rapid healing to leave a small, calcified nodule. Israel et al[6] report such a case with mild symptoms of grippe lasting less than 48 hours, associated with negative coccidioidin and tuberculin tests, a positive histoplasmin reaction, and the development of strongly positive serologic titers for histoplasmosis. They point out that an illness so slight and brief would ordinarily have led neither to hospitalization nor to X-ray examination.

Other cases of benign primary infection in which Histoplasma have been recovered from sputa or blood have recently been reported.[7, 8] It is suggested that the primary infection with histoplasmosis, like that of tuberculosis and coccidioidomycosis, is in most instances responsible for few symptoms.[6]

Generalized histoplasmosis may also follow a chronic course. Many such patients will ultimately die of their disease, but some will have a spontaneous remission with marked improvement and apparent arrest of the infection.

Scattered granulomatous lesions representing every gradation of reaction from isolated giant cells to epithelioid tubercles or frank caseation necrosis may be found in nearly any organ or tissue. The organs most frequently involved are the lymph nodes, lungs, spleen, liver, adrenal glands, bone marrow, skin and oral cavity.

When the histologic picture is one of caseation necrosis, as may occur in fatal histoplasmosis involving the lung or adrenal glands, a mistaken pathologic diagnosis of tuberculosis may easily be made. If, on the other hand, the histologic appearance is that of noncaseating epithelioid tubercles involving any or all organs, the lesions may be mistakenly regarded as diagnostic of sarcoidosis. This latter possibility has received recent attention in reports of disseminated histoplasmosis in patients having the typical clinical, laboratory and biopsy findings of sarcoidosis.[6, 9] Only when the "sarcoid" lesions were re-examined, using periodic acid stains, did the Histoplasma organisms, previously overlooked, come to light.

The causative organism, *Histoplasma capsulatum*, has the form in infected tissue of a small, oval, yeastlike fungus.[4] It may be cultured as such in sealed blood agar slants at 37°C. Culture on Sabouraud's medium at room temperature produces a cottony-white, moldlike, filamentous fungus. The organism can be cultured on all common laboratory media, but it may be necessary to hold the cultures for as long as a month before colonies appear.

Only 1 case has been reported with evidence that the fungus has been transmitted from animal to man. The mode of entry is unknown, although the almost constant involvement of the mesenteric lymph nodes is held to be strong evidence in favor of a gastrointestinal portal of entry.[10]

The case to be reported here is one of fatal, acute disseminated histoplasmosis in a young colored female resident of the District of Columbia. The diagnosis was established by needle biopsy of the spleen and liver, subsequently confirmed by culture of the fungus from the splenic tissue and bone marrow.

Report of Case

A 29-year-old colored housewife was admitted to Gallinger Municipal Hospital on November 17, 1952 with a 2 weeks' history of progressive illness manifested by headache and recurrent chills and fever. Other symptoms had included weakness, anorexia, nausea and vomiting. Five days prior to admission her physician found her too weak to get out of bed. At this time she had a nonproductive cough and a temperature of 103°F. Penicillin and terramycin were given without effect. The patient was hospitalized because her symptoms increased in severity with a rise in temperature to 105°F.

The past history was negative except for a hysterectomy and appendectomy 4 years previously. The patient was born in North Carolina and had lived in the District of Columbia for the past 13 years with the exception of 1 year's residence in Illinois.

Physical examination revealed a young, thin, colored female, appearing seriously ill. The temperature was 105°F., the pulse rate 128, the respiratory rate 22, and the blood pressure 114/60. The skin was hot and dry. The mucous membranes and nail beds were pale. There was no icterus, rash, cyanosis or petechiae. The pertinent findings included normal fundi, generalized lymphadenopathy, scattered wheezes and rales throughout both lungs, a sinus tachycardia with a grade 2 apical systolic murmur without cardiomegaly, a tender liver felt 5 cm. below the costal margin, and a greatly enlarged, firm, non-tender spleen extending to the iliac crest. The laboratory data included a white blood cell count of 7,500 with a normal differential, a hematocrit of 26 per cent, a normal urine except for 2 plus albumin, thymol turbidity of 6 units, alkaline phosphatase of 3.4 units, icteric index of 7.5, normal prothrombin time and negative cephalin flocculation. Numerous blood cultures proved to be negative.

Skin tests to tuberculin, histoplasmin and coccidioidin were all negative. The platelet count, bleeding, clotting and clot retraction times were all normal. Smears and cultures of the sputum and gastric washings were negative for tubercle bacilli. The spinal fluid was normal. The complement fixation test for Histoplasmosis was positive in a titer of 1:4. The roentgenogram of the chest showed a mottled infiltration extending from the hilar region throughout both lung fields (figure 1).

The patient was critically ill on admission and pursued a rapidly progressive downward course. For the first 48 hours she was treated symptomatically. The frequent chills and spiking fever persisted. An examination of the bone marrow on the third day was reported as consistent with the anemia of severe infection. The smears of the marrow showed no acid-fast bacilli. Specimens were sent for culture.

Antituberculous therapy was started on the third day by means of streptomycin and a derivative of isoniazid. The anemia persisted and the white blood cell count never rose above 7,500. A few drops of the splenic pulp were aspirated through a long 20-gauge needle and sent for culture. A cervical lymph node biopsy was reported as showing a noncaseating granuloma, consistent with sarcoid.

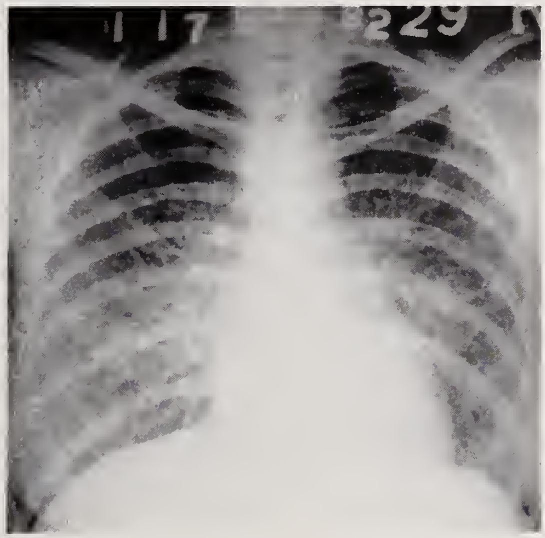

Fig. 1. Film on admission showing a mottled infiltrate extending from the hilar region throughout both lungs.

The clinical condition remained one of severe toxicity. A small hemorrhage appeared in the right fundus. Needle biopsies of the liver and spleen were done on the eleventh day. At this time an X-ray film of the chest showed some increase in the infiltration in both lungs. The patient was given 3 pints of whole blood. During the last 72 hours she lapsed into semi-coma and developed severe dyspnea, cyanosis and hypotension, from which she failed to respond, and expired on the thirteenth hospital day. Permission for an autopsy could not be obtained.

The sections of the biopsy material obtained from the liver and spleen provided the diagnosis (figure 2). The splenic tissue was markedly necrotic, but scattered reticuloendothelial cells were seen to contain small intracytoplasmic bodies, 2 to 3 microns in greatest dimension, basophilic centrally and surrounded by a halo. The hepatic tissue contained small granulomatous lesions. Within the reticuloendothelial cells could be seen the same small intracellular organisms as found in the spleen. These small bodies were morphologically identical with the yeastlike tissue phase of *Histoplasma capsulatum*. The bone marrow slides and the sections of the lymph node were then reviewed. Reëxamination quickly revealed the presence of the same organisms, previously overlooked.

Final proof was had 2 weeks later, when cultures of the material obtained by splenic aspiration and by bone marrow aspiration showed a pure growth on Sabouraud's medium of the cottony-white filamentous phase of *Histoplasma capsulatum*.

Comment

This case followed the usual rapidly fatal course of acute disseminated histoplasmosis. The failure of an acute case to react to skin-testing with histoplasmin is probably a reflection of the fact that dermal sensitivity develops only slowly, or it may be similar to the anergy shown by patients with overwhelming tuberculosis. Hodgson et al[11] point out that among all the cases of histoplasmosis reported up to 1949, one half of those who were tested with histoplasmin were non-reactors. When this fact is taken in conjunction with the significant incidence of positive reactors among the normal population, it would seem that the skin test is of

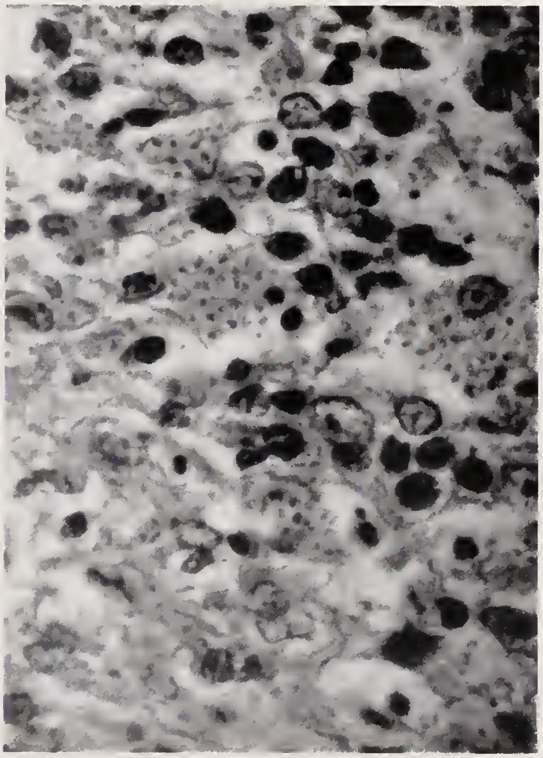

Fig. 2. Section of the lymph node from biopsy (H and E stain, oil immersion, reduced from 1,000 ×). The majority of cells in this field contain the ovoid yeast-like fungus *Histoplasma capsulatum*.

(*Continued on page 389*)

President's Page

CIVIC RESPONSIBILITY

LEADERSHIP IN A COMMUNITY RESTS UPON THOSE WHO CAN MANIFEST IT AND WILL TAKE IT. TRADITIONALLY, THE PUBLIC HAS EXPECTED ITS PHYSICIANS TO BE BETTER INFORMED THAN MOST PEOPLE. SOMETIMES A BUSY PRACTICE HAS BEEN PERMITTED TO CROWD OUT OPPORTUNITIES FOR THE PRACTITIONER TO BECOME AND REMAIN WELL INFORMED. IT COMES AS A SHOCK WHEN ONE FINDS HIS PHYSICIAN NOT CONVERSANT WITH MATTERS OF COMMUNITY CONCERN. PEOPLE HAVE THE RIGHT TO EXPECT THEIR PHYSICIANS TO BE COMMUNITY LEADERS.

Herbert P. Ramsey

HERBERT P. RAMSEY, M.D., F.A.C.S.

President, The Medical Society of the District of Columbia, 1953-1954

Editorials

HERBERT PERCY RAMSEY, M.D., F.A.C.S.

Dr. Herbert Percy Ramsey, 87th President of The Medical Society of the District of Columbia, a native Washingtonian, has been identified with the medical organization of which he is now the head for thirty-one years. During most of that time he has played a prominent role in its activities, giving more than generously of his exceptional talents for organization work. Those who know him best have also been impressed by his dedicated efforts on behalf of his profession and his gifts for leadership. These have won him national recognition, especially since his first appearance in the House of Delegates of the American Medical Association, where he represented the Society with unusual distinction. He has received high praise for his work as member, and later Co-chairman, of the AMA's Committee on Blood. Here he displayed untiring patience and analytical ability of the first order.

Born in Washington, D.C., June 11, 1894, he is the third of five children of William H. and Ida W. Ramsey. He received his early education in the public schools of his native city, graduating from Eastern High School in 1912. He obtained a Bachelor of Arts degree from George Washington University in 1916 and the degree of Doctor of Medicine from the same institution in 1920. Internships followed at Garfield Hospital (1919 to 1920) and Rincon Hospital, Trujillo, Honduras, United Fruit Company (1920 to 1921).

In 1921–1922 he was a resident physician at Columbia Hospital for Women, Washington, D.C., and from 1922 to 1923 he held the position of Chief Resident Physician at George Washington University Hospital. In 1924 he did postgraduate study in gynecology and obstetrics at Peking Union Medical College, Peking, China. From 1923 to 1927 he was Chief of the Department of Obstetrics and Gynecology, Soochow Hospital, Soochow, China.

Dr. Ramsey returned to the United States in 1927 and has been engaged in private practice in Washington since that time. He became a member of the medical staff of Garfield Memorial Hospital in 1928. In 1936 he was appointed Senior Attending Gynecologist, and in 1953, Chairman of the Department of Gynecology at Garfield. He became Consulting Gynecologist at Gallinger Municipal Hospital in 1941.

A member of the faculty of George Washington University School of Medicine since 1928, he has held the position of Clinical Professor of Obstetrics and Gynecology since 1943.

Among the numerous professional organizations of which he is a diplomate, fellow or member are the American Board of Obstetrics and Gynecology, American College of Surgeons, International College of Surgeons, American Medical Association, Washington Gynecological Society, Southern Medical Association, George Washington University Medical Society, Clinical Club of Washington (Life member), International Medical Club, Pan-American Medical Society, American Committee on Maternal Welfare, and Washington Gynecological Society (Past President).

Organizations other than professional with which he is affiliated include the Cosmos Club, Explorers Club of New York, Corinthian Yacht Club of Washington, D.C. (Fleet Surgeon), and the Washington Board of Trade.

Opinions expressed in contributions to the Editorial Section are those of the writers and do not necessarily reflect the views of The Medical Society of the District of Columbia.

Dr. Ramsey became a member of the Medical Society of the District of Columbia on January 4, 1922. He did not become actively interested in Society affairs until some ten years later, when Dr. A. B. Bennett, then President of the Society, appointed him Chairman of the Committee on Public Information. Those familiar with his work on the Committee during the years 1934 to 1938 will recall what an outstanding job he did.

For some thirteen years, beginning 1936, Dr. Ramsey was Chairman of the Obstetrical Board. Here again, his service was distinguished by understanding and thoroughness. There is little doubt that the work of this Board in the earlier years of its existence, due largely to Dr. Ramsey's interest in it, served a very useful purpose in the community and contributed, in no small degree, to the reduction in maternal and infant mortality.

Among his other Society assignments have been Chairman of the Committee on Maternal Welfare (1935–1937) and membership on the Editorial Board of the MEDICAL ANNALS (1943–). Mention has already been made of the fact that he represented the Society in the House of Delegates of the AMA from 1946 to 1952 and became nationally known not only because of his ability, but because of the ease and effectiveness with which he speaks in public.

Dr. Ramsey enlisted in the Medical Reserve Corps in 1918 and was transferred to active duty in the Student Army Training Corps. He was discharged on November 10, 1918.

Dr. Ramsey married Margaret Lillian Frost on March 14, 1923. The Ramsey's have two daughters, Mrs. A. O. Pierrot, Jr., San Salvador, El Salvador, and Mrs. Vernon R. Gatley, Jr., Culpeper, Virginia.

Personally, Herbert, as he is called by his friends, is a thoughtful and kindly man who goes out of his way to be helpful to others. His religious bent was expressed in his service as a medical missionary in China. It still reveals itself in his numerous community activities, many of which have made heavy demands on him. The Washington Metropolitan Health Council, of which he was Chairman, is an example of a project for which he made much sacrifice in time, labor, and money.

A hard-working physician, he has had little time for relaxation. When he does, he satisfies his insatiable curiosity about far-away places, some of which he has visited. A few of his friends have been privileged to see his excellent motion pictures of Mexico and Central American countries. In the summer, he enjoys nothing better than to spend a weekend with his wife and a few friends aboard his cabin cruiser.

Of one thing Society members can be certain—under Dr. Ramsey's able and wise guidance, the Society will have a very busy and fruitful year.

NEW MENTAL HEALTH ASSOCIATION FOR WASHINGTON

The organization of the District of Columbia Mental Health Association was completed on May 4, 1953. This Association should very materially assist in the improvement of community mental health resources and serve as a medium for the education of the public in the principles of prevention of mental illness.

Organizational plans were very carefully worked out in a series of meetings attended by representatives of a number of community, school, church and civic organizations, acting with the advice and counsel of The Washington Psychiatric Society and the National Association for Mental Health.

Mr. G. Howland Shaw was elected President and Judge Luther W. Youngdahl, Honorary President of the Association. The interest of these two community leaders in mental health is well known in Washington, and without doubt they will launch a dynamic program for the new Association.

The membership of the District of Columbia Mental Health Association will be primarily a lay group representing a total cross section of the community. Assisting the officers will be a nine-member Board of Directors and an Advisory Council of specialists in psychiatry and allied fields.

No agency, public or private, has a wider field of interest and activity than a mental health association. The need for an awakened community interest in improving facilities for the prevention and treatment of mental illness is obvious, and it is hoped that through a strong and dynamic program the District of Columbia Mental Health Association will be successful in improving the total psychiatric facilities in the city of Washington.

ADDISON M. DUVAL, M.D.

PREPARING CHILDREN FOR SURGERY

Dr. James F. Mitchell often told the story of a group of American physicians watching an operation for harelip in a German clinic before World War I. With no labor shortage, there was an orderly to hold each extremity and a nurse to hold the head. To the timid question, "Why don't you give the child an anesthetic," the Professor replied, "Vot's der use? Ve can hold him!"

While few today would admit subscribing to such a philosophy, the frequent failure to review and modernize archaic routines causes actual, even if unconscious, compliance with it to be widespread. The survey of almost any group of young adults will indicate a goodly percentage who have vivid recollections of very unpleasant or even terrifying pre-anesthetic and induction periods as children. On the other hand, proper pre-anesthetic management of the child as well as the adult can and should make this period pleasant enough to be quickly forgotten.

The key to the situation is honest, straightforward information coupled with proper sedation.

At all ages apprehension generates suffering. Fear of the unknown produces misery and imprints it so strongly on the mind that forgetfulness does not easily succeed. In varying degree, but always to some extent, sincere efforts to decrease this factor are productive of good. The establishment of friendly communication is the first step in good anesthesia.

It is a common mistake to accept the statement that "children can't take narcotics." A generation ago Guedel called attention to the fact that reflex nerve irritability parallels metabolic rate which therefore tends to control the amount of drug needed for a given depressant effect. The highest peak of metabolic activity during life occurs at the age of 6 to 8 years. This is the age above all others when some sedation is needed to smooth out the pre-anesthetic period. To argue that the child of 8 should not enjoy the benefit of sedation because it might decrease the reserve, possibly in respiration, would lead logically to the atavistic conclusion that anesthesia itself is dangerous and that therefore neither is justified as a shield against an otherwise horrible surgical experience. All would now hold this to be ridiculous.

If friendship and kindness are the first step toward anesthesia, sedation, even the night before, is the actual beginning of anesthesia. It is important that such medication be properly timed in relation to anesthesia, allowing 1½ to 2 hours for absorption by mouth or rectum, about an hour for hypodermic injections, or at least 20 minutes for intramuscular injections. Schedule changes without notice are therefore not in the interest of the patient.

In the effort to avoid the recollection of unpleasantness in the child, dehydration and starvation should be prevented. Among the needless cruelties of common routines has been the order "Nothing p.o. after midnight," even for late morning or afternoon surgery. The younger the child the less excuse for such unthinking stereotypy. For the baby on formula feeding, it should not be withheld beyond the regular period between feedings. At all ages, water and clear liquids should be given freely to within 4 hours of surgery. In hot weather especially water may be given to within an hour or two of surgery with more benefit than harm. Sugar may be given with it to advantage.

The tendency is strong to permit routine to substitute for thinking, thus stifling progress. There is hardly a medical field in which review of customary procedure will reveal more need for change than in the care of children in relation to anesthesia.

The best solution will be found to involve almost equal emphasis on friendliness in the personal relationship, proper sedation the night before and immediately before anesthesia, and a strict, constant vigilance against the overdosage which often comes so easily during the period of anesthesia. The littlest children need the same courteous attention as the biggest adults.

D. S.

THE PROBLEM OF THE CASE WHICH IS CONSIDERED "HOPELESS"

The thoughtful editorial published in the May issue stated many of the problems which confront the seriously ill patient. However, to declare a group of such patients as "hopeless" may in itself aggravate the problem. The implication in such a definition is that hope can exist within a patient only if his physician has available for use that which can dissolve completely not only the pathologic processes but all the related problems which have been brought into existence. Such a concept might narrow the field of the physician to the point where the service which he renders might become merely technical and he might become the impersonal machine which he cannot be if he is to be a good physician.

The purpose of the practice of medicine is to offer aid to the ill. No physician is ever expected to do more than he is able, but each physician is expected to do his best. When his best is followed by death, he does not become a poor physician, but when less than his best effort is offered, he has become a poor physician whether cure or death results. When his best effort has no apparent chance of success, his patient need not lose hope any more than anyone need lose the same hope; because, for each, this present sojourn must end in death. Consideration of life without death is as impossible as that of life without birth.

If we become sincere about aid to those patients who present problems which we physicians cannot solve, we must remeber that the problems do not spring up overnight. Cirrhosis of the liver is not "hopeless" when the potential patient first forgets to eat for the sake of drinking. Carcinoma of the uterine cervix is not a hopeless problem when it exists in situ in normal, healthy-appearing young women. Should we consider as hopeless cases that unknown percentage of women who refuse periodic health examinations which include cytologic examinations of exfoliated cervical cells or should we wait until the advanced cervix cancer has manifested itself by producing those severe signs and symptoms which distress so much both the physician and the family?

Certainly we should "make provision for those who have seen better days but are deprived of the privilege of passing away in comfort and peace." But to do so requires both that we begin our efforts much earlier and that we permit each to hope that although as physicians we are unable to cure some ills, we are still willing to do our best to be of help. To do this best requires that each of us offer to each patient today all that is available. Where local defects exist, each of us must help to correct them. Then, after we have done our best for today's patient we can, as physicians, lend wholehearted support to research which we can hope will offer a better solution to today's problems tomorrow. If we do this, no patient need be considered a hopeless case.

Calvin T. Klopp, M D.

DELEGATES' REPORT ON ANNUAL MEETING OF AMERICAN MEDICAL ASSOCIATION

The 102nd Annual Meeting of the American Medical Association in New York, June 1–5, 1953, broke all attendance records, total registration approaching 50,000 (17,958 physicians). As usual, the scientific sessions and the exhibits were superb, although the Grand Central Palace is far from ideal as an exhibit building mainly because the AMA show has outgrown these facilities.

Activities of the House of Delegates were diversified and, in a few instances, highly controversial. Outstanding in this latter category were a report on osteopathy and certain resolutions concerning intemperate public statements.

Report on Osteopathy

A report of the Committee for the Study of Relations Between Osteopathy and Medicine (Chairman, Dr. John W. Cline) recommended:

> "1. That the House of Delegates declare that so little of the original concept of osteopathy remains that it does not classify medicine as currently taught in schools of osteopathy as the teaching of 'cultist' healing.
>
> "2. That the House of Delegates state that pursuant to the objectives and responsibilities of the American Medical Association, which are to improve the health and medical care of the American people, it is the policy of the Association to encourage improvement in the undergraduate and postgraduate education of doctors of osteopathy.
>
> "3. That the House of Delegates declare that the relationship of doctors of medicine to doctors of osteopathy is a matter for determination by the state medical associations of the several states and that the state associations be requested to accept this responsibility.
>
> "4. That the Committee for the Study of Relations Between Osteopathy and Medicine or a similar committee be established as a continuing body."

This Committee report was considered by the House Reference Committee on Miscellaneous Business, and two opposing views were expressed by majority and minority groups of the Reference Committee. The minority report favored approval of the Cline Committee recommendations. The majority report, which won out after a warm debate of the issue, recommended postponement of decision for a year. During that time, members of the House were cautioned to prepare to answer certain questions posed by the Board of Trustees regarding osteopathy. These questions were:

"1. Should modern osteopathy be classified as 'cultist' healing?

"2. Since the objectives of the American Medical Association include improvement in undergraduate and postgraduate education, should doctors of medicine teach in osteopathic schools?

"3. Should the relationship of doctors of medicine to doctors of osteopathy be a matter for determination by the several state associations?"

Public Relations

There were eleven separate resolutions dealing with the ethical principles involved in the publication in a national magazine of an interview between Dr. Paul R. Hawley and the magazine's editors. That interview contained a number of statements that were thought by many physicians to be unfounded and highly damaging to the medical profession.

During hearings by the Reference Committee on Legislation and Public Relations, Dr. Hawley appeared in his own defense. He expressed appreciation for the opportunity to present his views, and contended that he had assumed that his "off-the-cuff" statements to the magazine editors were not to have been published, but were to have served as the basis for a more formal article on fee-splitting and related topics.

To the satisfaction of the House of Delegates, the Reference Committee on Legislation and Public Relations solved this difficult problem by recommending "no action" on the eleven resolutions and by substituting a general statement, in part as follows:

> "The Principles of Medical Ethics as formulated, inter-

preted and applied by the American Medical Association must be considered the only fundamental and controlling application of ethics for the entire profession. Any statement relating to ethical matters by other organizations within the general profession of medicine advances views of only a particular group and is without official sanction of the entire profession as represented by the American Medical Association.

"Your Reference Committee believes that the harm done to the public and to the profession by the current articles which lower the confidence patients have in their doctors cannot be objectively evaluated. This highlights the fact that, when individuals or groups without official status in the American Medical Association utter or publish ill-considered statements, the result too often is that the confidence of the public in the medical profession is placed in jeopardy.

"The Reference Committee believes that the members of the House of Delegates have demonstrated their devotion over the years to the principles of American democracy. This devotion includes the right of free speech. With this, the Committee agrees unqualifiedly.

"Broad generalizations, ill-advised and poorly prepared statements that often fail to convey the intended meaning are most unfortunate and are to be deplored. Destructive critical comments serve no useful purpose. Your Committee has the utmost confidence that the great majority of our members are entirely capable of avoiding these pitfalls without additional advice from this Committee."

VETERANS CARE

At the meeting of the House of Delegates in December, 1952, a Special Committee on Federal Medical Services (Chairman, Dr. Walter B. Martin) reported on medical care for veterans, and made the following recommendations:

> "Your Committee recommends with respect to the provision of medical care and hospitalization benefits for veterans in Veterans Administration and other Federal hospitals that new legislation be enacted limiting such care to the following two categories:
>
> (a) Veterans with peacetime or wartime service whose disabilities or diseases are service-incurred or aggravated, and
>
> (b) Within the limits of existing facilities to veterans with wartime service suffering from tuberculosis or psychiatric or neurological disorders of non-service-connected origin, who are unable to defray the expenses of necessary hospitalization.
>
> "Your Committee recommends that the provision of medical care and hospitalization in Veterans Administration hospitals for the remaining groups of veterans with non-service-connected disabilities be discontinued and that the responsibility for the care of such veterans revert to the individual and the community, where it rightfully belongs."

At the time, the House postponed action on that report, mainly because of controversy about medical care for veterans with non-service-connected disabilities other than tuberculosis and neurologic and psychiatric disorders. By the time of the recent June meeting, opinion had crystallized and the issue was squarely met—the Martin Committee report endorsed.

MEDICAL EDUCATION

There were several resolutions regarding the "Revised Essentials of an Approved Internship" that had been adopted in December, 1952. The Reference Committee on Medical Education and Hospitals offered a substitute resolution that was adopted after some discussion. This action abolished the rule whereby approval may be withdrawn from an internship program which for two consecutive years fails to obtain at least two thirds of its stated complement of interns. The resolution also called for further study of the "Essentials" by a committee to be appointed by the Speaker of the House of Delegates and to have at least half its membership made up of doctors in private practice not connected with medical schools or affiliated hospitals.

In this action, the House of Delegates seemed to be critical of a previous committee whose report was the basis for revision of the "Essentials." Also, removal of the "two thirds rule" from the "Essentials" did away with the first constructive step that had been taken to reduce the disparity between the number of medical graduates and the number of internships.

Also in this field, the House heard reports on the slow growth of funds to support medical education; learned that the Student AMA now has chapters in 64 of the 79 approved medical schools and is financially solvent; gratefully accepted a check for $10,000.00 from a SAMA spokesman in partial payment of indebtedness to the AMA.

MISCELLANEOUS BUSINESS

A resolution was presented by the delegation from the District of Columbia at the request of the Executive Board of the Medical Society of the District of Columbia. It had been prepared and submitted to the Board by the Subcommittee on Mental Health with the approval of the Committee on Public Health. The resolution follows:

"WHEREAS, President Eisenhower's Executive Order 10450, dated April 29, 1953, dealing with Security Requirements for Government employees states that among the threats to Government security are the following: 'An adjudication of insanity, or treatment of serious mental or neurological disorders without satisfactory evidence of cure.' [Sec. 8 (a) (1) (iv)]; and

"WHEREAS, this Order has singled out two groups of illnesses from the total mass of human ills, each of which may have psychological complications; and

"WHEREAS, it is recognized that employees with severe mental illness as well as those with other illnesses may in some instances constitute a threat to Government security; and

"WHEREAS, well established personnel policies now provide leave of absence in the event of serious illness; and

"WHEREAS, the extent of illness can, in each instance, be determined only by a qualified doctor of medicine; and

"WHEREAS, the Order would seriously discourage employees from seeking medical treatment, thereby destroying medicine's most effective tools, namely, early diagnosis and treatment; and

"WHEREAS, the Order indicates a need for a critical survey of the relation of all illnesses among Government employees to the total subject of security;

"THEREFORE BE IT RESOLVED, that the House of Delegates of the American Medical Association instruct the Association's Board of Trustees to recommend to the President of the United States (1) that he rescind Section 8 (a) (1) (iv) on the grounds that it is unscientific, unnecessary, and damaging; and (2) that he direct that the subject of illness among Government employees as related to security be further reviewed."

Dr. Daniel Blain, Medical Director, American Psychiatric Association, testified at the Reference Committee on Legislation and Public Relations in support of this resolution, emphasizing the discriminatory features of President Eisenhower's Executive Order. The House voted to request further study of the question and to refer the matter to the Special Assistant (Health and Medical Affairs) to the Secretary of the Department of Health, Education and Welfare.

Other actions included approval of Congressional bills intended to prevent treaties from superseding the laws of the United States; promise of a report at a later date on problems concerned with malpractice insurance premiums; reapproval of the action of AMA executives in calling a special meeting last March; disapproval of prescribing by secret code numbers; selection of Dr. Alfred Blalock of Baltimore for the annual Distinguished Service Award.

From among their distinguished guests, the House listened to a thoughtful speech by Mrs. Oveta Culp Hobby; attended, as usual, a "10-minute" address by the Commander of the American Legion; and had an entertaining, informal talk from Mrs. Ivy Baker Priest, Treasurer of the United States.

REPORT OF COMMITTEE ON BLOOD

The Committee on Blood reported that 2,460,000 units of blood were collected in 1952 for defense and civilian defense purposes, 2,017,000 by the Red Cross and 443,000 by coöperating blood banks. Blood collected for civilian use amounted to 4,193,000 units, 39 per cent of which was collected by the Red Cross.

The report showed the greater emphasis being placed upon serum albumin and the newer blood expanders such as dextran and PVP and a gradually decreasing utilization of plasma as such, although much of the latter remains to be gotten to complete the reserves needed for civilian defense. The allocation mechanism for gamma globulin was described, showing the key position occupied by state health officers.

The House adopted the Committee's recommendation that the AMA negotiate with the American National Red Cross and major national medical bodies to evolve a more comprehensive blood program in the United States.

ELECTION OF OFFICERS

Dr. Edward A. McCormick of Toledo, Ohio, took office as President of the American Medical Association for this year. Officers elected (or reëlected) were as follows:

President-elect:

Walter B. Martin, M.D., Norfolk, Virginia

Vice President:

Carl H. Gellenthien, M.D., Valmora, New Mexico

Secretary and General Manager:

George F. Lull, M.D., Chicago, Illinois

(Continued on page 390)

MEDICAL BOWLERS CHALK UP FIFTEENTH ANNIVERSARY

Casualty Hospital won the championship of the D. C. Medical Bowling League as it stood off final night challenges of Suburban and George Washington teams in the fifteenth season just concluded.

At the Annual Banquet of the League, held at Brook Farm Restaurant in Chevy Chase, Md., April 23, Arch McDonald, dean of Washington sportscasters delivered the principal address and distributed prizes. Dr. Maurice VanKinsbergen, President of the League, presided. Among the guests present were President-elect Karl Hayden Wood of the D. C. Dental Society and "Ted" Wiprud, Secretary of the D. C. Medical Society.

The five teams which stood highest in score and the members of each follow:

Casualty (first place): Dr. A. Dibbs, *Captain;* Drs. Henry H. Canton and Andrew Tessitore and Messrs. Kenneth Clark and Rene Duffy.

Suburban (second): Dr. G. Roland Gable, *Captain;* Drs. Andrew J. Betz, James B. Faris, Robert B. Irey, Millard F. Ottman and S. Paul Porton.

George Washington (third): Dr. J. W. Price, *Captain;* Drs. Blaine H. Eig, Bernard A. Fitzgerald, William R. Moses, James A. Roberts, and Mr. Frank J. Baiers.

Washington Hospital Center (fourth): Dr. VanKinsbergen, *Captain;* Drs. Vincent J. DiFrancesco, Richard F. Fabrizio, Charles F. Hill, John A. Kennedy, Jerome J. Krick, Roger Lochhead, and Donald R. Sickler.

Sibley No. 2 (fifth): Dr. George H. McLain, *Captain;* Drs. R. W. Barnhard, J. Phelps Hand, John R. Hogan, Hugh W. Irey, Sollie Katzman, Raymond C. Kirchner, W. B. Morse and Milton F. Weingarten.

OPERATING ROOM
Copr. 1953 by NEA Service, Inc.

Take something out I won't miss—I want to be up in time to bowl in the D. C. Medical Sweepstakes.

Individuals awarded prizes for high scores were:

High League Average

First	Mr. Paul Duffy	117
Second	Mr. Baiers	113

High League Average for Doctors

First	Dr. George Resta	108–45
Second	Dr. Betz	108–38
Third	Dr. Frank Richardson	108–25

High Individual Game

First	Dr. W. R. Perkins	182
Second	Dr. Gable	160
Third	Dr. Samuel Diener	159

High Individual Set

First	Dr. Ambrose Cook	393
Second	Dr. Charles Hageage	391
Third	Dr Hand	390

High Strikes

First	Dr. McLain	47
Second	Dr. Tessitore	44
Third	Dr. Price	39

High Spares

First	Dr. Ottman	171
Second	Dr. F. E. Musser	142
Third	Dr. Porton	138

High Average—Each Team

Casualty	Mr. Clark	103–3
Children's	Dr. Israel Kessler	102–20
Columbia	Mr. Frank Boyer	103–21
Doctors	Dr. Leland S. Madden	98–68
Garfield	Dr. Duane C. Richtmeyer	106
Georgetown	Dr. Gordon R. MacDonald	106–40
George Washington	Dr. Eig	104–10
Good Hopers	Dr. E. Cornelsen	103–11
Prince Georges	Dr. George Hageage	103–24
Washington Hospital Center	Dr. VanKinsbergen	103–5

(Continued on page 390)

MILE POSTS TO HEALTH

The District of Columbia Survey of Medical Care for the Indigent and Related Services*

VIII. The facilities for long-term institutional care, other than in hospitals, are inadequate in quantity and in quality of care.

Facilities are needed to care for four groups of persons: those requiring a limited period of convalescence; the chronically ill no longer in need of general hospital care but requiring institutional care while undergoing treatment and rehabilitation; persons requiring institutional nursing care under medical supervision; and those requiring merely boarding home care. It is essential that all these facilities provide or have access to adequate medical and nursing service, preferably in close working relationship with a hospital.

The shortage of nursing home beds is indicated in part by the longer-than-average length of hospital stay of cases paid for by the Bureau of Medical Assistance and the Hospital Service Agency. At Gallinger Hospital, 5.5 per cent of the patients on the Medical and Surgical Services were medically eligible for the home-care program; however, two thirds had unsuitable homes and, therefore, had to stay at the hospital because no suitable facility for long-term care was available.

The study of nursing homes by the Health Section of United Community Services showed that many of the homes provided little more than boarding home care. Moreover, the District sets no standards for the quality and quantity of medical, nursing, and related services in these homes; they are merely required to meet building and fire safety standards.

The monthly maximum grant of $90 to public assistance recipients needing nursing care is insufficient to purchase care of adequate quality in addition to providing their subsistence.

It is recommended that:

> WAYS BE FOUND TO OVERCOME THE SHORTAGE OF ADEQUATE FACILITIES FOR LONG-TERM CARE.

Some of the following suggestions should be explored for making more beds for long-term care available: the establishment of chronic-disease or other units for long-term care as wings of the general hospitals or in close affiliation with them; the reallocation of beds at Gallinger Hospital to make some available for this purpose; further expansion of the infirmary at the Home for the Aged and Infirm; the establishment of new facilities for long-term care, preferably under voluntary auspices.

Standards of licensing of institutions for long-term care in the community should be developed to provide care of good quality. The regulations governing these standards should be administered with an adequate staff, using an educational emphasis. The experience of existing licensure programs in many states should be drawn upon in the development of a constructive and effective program. Every effort should be made to increase the amount of money available for providing adequate care of public assistance recipients through grants for nursing service or through the purchase of service on behalf of the recipients.

IX. Emergency ambulances are operated by the Health Department and by Casualty and Emergency Hospitals. The Fire Department dispatches all ambulances. Calls received by the Health Department for emergency ambulance service are screened to determine whether an ambulance or a physician should answer the call. A District Physician of the Health Department is asked to answer calls requiring the attention of a physician. When an ambulance is needed, the call is relayed to the Fire Department, which dispatches an ambulance. The Fire Department also dispatches an ambulance without further inquiry on request from the District Physicians and the District of Columbia Medical Society's MEDICAL BUREAU. Other calls received by the Fire Department are screened by a dispatcher, who decides whether an ambulance is needed. No attempt is made to determine whether a District Physician should answer the call.

Gallinger Hospital interns are assigned to the Health Department ambulances. They spend a full month of their twelve months' internship on this unsupervised service. The contracts between the Health Department and Casualty and Emergency Hospitals specify that an intern must ride the ambulance when answering emergency calls. In other cities, as a result of experience during World War II, trained hospital aides have been substituted successfully for interns when their use has been combined with a central screening agency.

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* Abbreviated portions of the report of the Survey will appear in the MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA from month to month. This is the second installment, the first having appeared in the June issue.

Screening of all calls by trained personnel to determine the need for physician service, emergency care, and transportation would eliminate the necessity for the routine assignment of interns to ride ambulances. Adequate screening would reduce the volume of unnecessary ambulance runs on calls not requiring emergency transportation.

The Health Department has 2 emergency ambulances stationed at the Municipal Center. This central location has been found to reduce to a minimum the time interval between receipt of and response to a call.

Patients taken to a hospital by the emergency ambulance service are at times refused admission to the emergency room; delay in treatment then occurs while the patient is taken to another hospital. This practice can be detrimental to the patient.

To improve the emergency ambulance service it is recommended that:

A. ONE CENTRAL SCREENING AGENCY BE UTILIZED NOT ONLY FOR EMERGENCY AMBULANCE CALLS BUT ALSO FOR EMERGENCY PHYSICIANS' SERVICES. IF FEASIBLE, CONSIDERATION SHOULD BE GIVEN TO THE USE OF THE D. C. MEDICAL SOCIETY'S MEDICAL BUREAU AS THE LOGICAL AGENCY TO ASSUME THIS FUNCTION IN VIEW OF THE TRAINING OF THE PERSONNEL AT THIS BUREAU. SUITABLE FINANCIAL ARRANGEMENTS BY THE D. C. GOVERNMENT TO BEAR ITS FAIR SHARE OF THE EXPENSE OF OPERATING THE MEDICAL BUREAU SHOULD BE WORKED OUT.

B. INTERNS BE REPLACED BY TRAINED ATTENDANTS FOR ALL EMERGENCY AMBULANCE CALLS EXCEPT WHEN THE SCREENING INDICATES THE NECESSITY FOR A PHYSICIAN.

C. ALL HOSPITALS AND AGENCIES WITH AMBULANCE SERVICES DESIGNATE A REPRESENTATIVE TO SERVE ON AN ADVISORY COMMITTEE TO THE D.C. HEALTH DEPARTMENT TO COORDINATE ALL EMERGENCY AMBULANCE SERVICES IN THE DISTRICT AND VICINITY.

D. ALL HOSPITALS ADOPT THE POLICY OF ACCEPTING INTO THE EMERGENCY ROOM ANY PATIENT BROUGHT IN BY THE EMERGENCY AMBULANCE SERVICE. DISCHARGE OR TRANSFER ARRANGEMENTS ARE TO BE MADE ONLY AFTER THE PATIENT HAS BEEN ADEQUATELY EXAMINED AND IT IS DEEMED SAFE TO MOVE HIM.

X. The Health Department has two ambulances to transport nonemergency indigent and medically indigent patients to and from hospitals and clinics. A station wagon is available to transport patients between their homes and Gallinger Hospital. This nonemergency transportation service is essential for the indigent patients living at home and requiring medical care who would otherwise be unable to get to the hospital or clinic. It is recommended that:

THE NONEMERGENCY TRANSPORTATION SERVICE OF THE HEALTH DEPARTMENT BE CONTINUED. THE COMMITTEE FINDS THAT THIS SERVICE IS ADEQUATE AND FILLS A REAL NEED.

XI. Homemaker-aides are of recognized value in keeping families together when the mother is ill at home or in the hospital. They can also be used to advantage to help the family and may even eliminate the need for hospitalization of a patient with chronic illness who can receive care at home. They are a useful adjunct to an organized home-care program. The present Homemaker Service of the Health Department, though restricted to a small staff by lack of funds, is performing a useful service and meeting a need in the District. It is recommended that:

THE HOMEMAKER SERVICE OF THE HEALTH DEPARTMENT BE EXPANDED TO PROVIDE AN ADEQUATE AMOUNT OF SERVICE.

The Committee heartily endorses the provision of housekeeping assistance to keep families intact in the event of illness.

XII. Indigent and medically indigent patients attending clinics of the coöperating hospitals receive the first week's supply of drugs from the hospital, but must go to the Health Department Pharmacy for refills of prescriptions. This requirement imposes hardship on some patients. Extra travel is involved in going to the Pharmacy. The Pharmacy is closed on weekends. Both of these factors may discourage patients from having prescriptions filled or may force the patient to spend money needed for food and other essentials to purchase drugs at a commercial pharmacy. Medically indigent patients can go directly from the hospital clinics to the Health Department Pharmacy to have prescriptions refilled. Public assistance recipients, however, are required to obtain prior certification from the Public Assistance Division of the Board of Public Welfare.

The use of the Health Department Pharmacy for refill prescriptions was instituted to eliminate a former unsatisfactory practice in which the hospitals charged the Health Department clinic visit fees when patients returned to the clinic to obtain drugs only. The Committee considers the use of the Health Department Pharmacy to refill prescriptions as an ineffective solution to this problem. It is recommended that:

A. MORE EFFECTIVE METHODS BE DEVELOPED TO FURNISH DRUGS TO NEEDY PATIENTS.

B. THE CERTIFICATION BY THE PUBLIC ASSISTANCE DIVISION OF DRUG PRESCRIPTIONS FOR RECIPIENTS BE DISCONTINUED.

Consideration should be given to a drug formulary and fee schedule to be used by the coöperating hospitals in supplying drugs. Contracts could also be negotiated with commercial pharmacies so that eligible patients can have prescriptions filled during weekends and at other times when clinics are closed.

Public assistance recipients should obtain drugs in the same manner as the medically indigent patients.

XIII. Provisions for the purchase of prosthetic and other appliances for the indigent and medically indigent are unsatisfactory. Administrative procedures work to the disadvantage of the patient. Authorization for and purchase of appliances are now made by the Public Assistance Division for public assistance recipients, and by the Bureau of Medical Assistance for the medically indigent. Gallinger Hospital and Glenn Dale Sanatorium do not furnish prostheses and appliances, although they give all other hospital services; these hospitals must apply to the Public Assistance Division or to the Bureau of Medical Assistance for the authorization and purchase of appliances.

The procedure for purchasing expensive appliances, requiring the acceptance of the lowest of three bids in many instances, interrupts the treatment or rehabilitation of the patient. This procedure results in procuring the cheapest kind of appliance, which is often medically inadequate. The policy precludes the purchase of appliances from a dealer who is accustomed to work with the physician ordering the appliance.

Appliances and prostheses, when indicated, are an inseparable part of the total treatment of an individual patient. They should be considered as important as antibiotics in a specific illness. Without the required therapy in either instance, the patient cannot receive adequate care. It is realized that it takes time to make prostheses and appliances but any additional time necessitated by the requirements of an administrative procedure in procuring them is inexcusable.

The funds available for such appliances are insufficient. It is recommended that:

A. THE PROCEDURE FOR THE PURCHASE OF PROSTHETIC AND OTHER APPLIANCES FOR THE INDIGENT AND MEDICALLY INDIGENT BE REORGANIZED TO GIVE BETTER SERVICE TO THE PATIENT.

B. MORE FUNDS BE MADE AVAILABLE FOR THE PURCHASE OF PROSTHETIC AND OTHER APPLIANCES FOR THE INDIGENT AND THE MEDICALLY INDIGENT.

Administrative procedures for the purchase of appliances should make the appliance available to the patient as promptly as possible; should assure the required quality from the medical standpoint; and should satisfy the treatment and rehabilitative requirements of the patient. Gallinger and Glenn Dale Hospitals should have funds for the direct purchase of prostheses and appliances for their eligible patients.

Standard specifications and prices should be developed with the help of a technical advisory committee, so that appliances may be purchased from any dealer.

XIV. Some individuals living on marginal incomes find it financially disastrous to take time off from work and lose pay to attend day clinics. It is recommended that:

> CLINICS BE ESTABLISHED TO SERVE THE MEDICALLY INDIGENT DURING EVENING HOURS AND ON WEEKENDS.

XV. Beginning in July 1952, and increasingly since then, the Health Department has assumed responsibility for rendering bedside nursing care to the indigent and medically indigent in their homes. Previously, the Instructive Visiting Nurse Society had furnished the service without remuneration from the District Government. The change in policy was made without adequate conferences or joint agreement with the Instructive Visiting Nurse Society, giving rise to confusion for the patients and the agencies. The Committee believes in the fundamental principle that the services of the official and voluntary nursing agencies must be considered as a whole. The agencies should have joint discussions leading to coöperative agreements on the allocation of functions and activities to each agency to meet the community's total needs for public health nursing.

The Committee agreed on a second basic principle regarding this problem. The Health Department's plan to furnish bedside nursing care to the indigent and medically indigent would restrict the Instructive Visiting Nurse Society to the care of patients able to pay. The Committee believes that a separate nursing service for the indigent is not conducive to care of good quality for the whole community. It is recommended that:

> STEPS BE TAKEN TO REACH AN AGREEMENT BETWEEN THE HEALTH DEPARTMENT AND THE INSTRUCTIVE VISITING NURSE SOCIETY FOR THE PROVISION OF BEDSIDE NURSING CARE IN THE HOME, IN KEEPING WITH THE PRINCIPLES SET FORTH ABOVE.

XVI. The work of this Committee represents the investment of considerable time and effort which must not be lost. Many recommendations have been made which can be implemented without further delay. Others, such as the development of an organized plan for medical care, require further study. In some instances, the appropriate agency to take action or to make additional studies has been suggested. In any event, it is essential that a group which has shared in the work of this survey continue in existence to provide a chain of concern for the problems with which it has dealt. It is recommended that:

> THE EXECUTIVE COMMITTEE OF THE SURVEY CONTINUE IN EXISTENCE TO ENSURE THAT THE RECOMMENDATIONS OF THE SURVEY ARE CARRIED OUT.

The Executive Committee should see that the recommendations requiring no further study are put into effect as soon as possible. Where recommendations require further development, the Executive Committee should see that appropriate agencies conduct the necessary studies and that the resulting recommendations are put into effect.

Hospitals

The time has long since passed when hospitals were separated from the community by a barrier of misunderstanding, lack of faith, and superstitious ignorance. Today the modern hospital is included in the community health programs and is narrowing the "No Man's Land" between prevention and definitive treatment.

In the District of Columbia there are 17 general and short-term hospitals. In addition there are several hospitals either for treatment of tuberculosis, mental illness, and alcoholism or for services to military and allied personnel.

For over fifty years the District of Columbia Government has contracted with certain community hospitals to provide service and care to the indigent and medically indigent sick. But not all the hospitals in the District of Columbia furnish care to the indigent and medically indigent. The Gallinger Municipal Hospital is primarily for such patients, bona fide residents of the District for at least a year. The Freedmen's Hospital, operated by the Federal Security Agency, has a number of beds available for them also.

The Health Department is the enforcing agency and the Bureau of Medical Assistance determines eligibility.

The hospitals under contract are all approved by the American College of Surgeons, approved for residency and fellowship training, and five are approved for internship training. In addition, 2 are medical school (university) hospitals and the facilities of 3 more are available for undergraduate training. These factors are listed to emphasize that the contract for medical care for the indigent issued by the District of Columbia Government is with hospitals of high community standing and good reputation and character.

Each of these hospitals enters into a standard contract with the District of Columbia Government. The contract in general specifies the provisions for furnishing inpatient, outpatient and emergency care, radiographic and ambulance services, and establishes the rates of payment for each of these services. The total amount which the hospital may collect for the year is specified by quarters. It further provides that payments made by the District in excess of operating cost shall be refunded by the individual hospital and moneys collected from the patient shall be turned over to the Collector of Taxes, D.C. No provision is made for reimbursing the hospital for costs in excess of reimbursement payments either on the per diem rate or through exhaustion of appropriation for medical and hospital services prior to end of fiscal year. Should the latter occur, the obligation continues as one of the hospital's and not of the District Government. In this respect, these hospitals underwrite the medical care program.

While the amounts are set against which a contract hospital may incur obligations, if the amount is not obligated, the balance remaining may be redistributed to other institutions incurring excess obligations. However, once the total appropriation is obligated, services rendered by the hospital to indigent patients are the responsibility of the individual hospital.

The Bureau of Medical Assistance does not carry the whole load of medical and hospital care for the indigent and the medical indigent. Considerable service is rendered to this group of persons by the Hospital Service Agency, a non-profit organization associated under the Community Chest Foundation.

The furnishing of hospital and medical care to the indigent and medically indigent with its social and economic implications upon the community is one of the major problems before communities today. The problem has been magnified by the relative and absolute increase of the aged group within the population. While it is recognized that chronic diseases are not confined to the aged, nevertheless, it is also recognized that a large percentage of aged people suffer from chronic illness. In the latter group of persons the existence of long-term illness frequently and rapidly disseminates individual and family resources, bringing in its course often economic and social complications. People recognize the problem as a community one and are planning to meet the problem in terms of prevention, rehabilitation, as well as adequate care.

The cost of furnishing this service is assuming a major economic role. In the light of the magnitude of the problem, expanded as it has been and is by the inflationary trend of modern living, it is imperative to stop and evaluate, and to determine if possible, the best future program to provide hospital and medical care to the indigent both adequate in quantity and in quality.

Hospitals are the places where newly graduated physicians, nurses, medical and technical students, and physicians preparing for specialties secure training. The best training involves the presence in the hospital of patients who cannot afford private physicians and whose care is supervised by the attending and resident staffs. Under the present contracts of the Health Department with the voluntary hospitals, carrying out a ruling of the Commissioners of the District of Columbia, no patients can be hospitalized at District expense unless they are emergency cases. This situation greatly restricts the training program in the voluntary hospitals, since it almost eliminates indigent patients from the wards of these institutions. Indigent patients should be treated like patients who can pay their way and should not be stigmatized by putting them in a separate category. Consequently, voluntary hospitals which can provide the proper quality of care to indigent patients should be utilized to the fullest extent possible for the care of such patients. Theoretically at least, municipal hospitals exist largely to supplement voluntary hospitals in this regard and to provide facilities and care for patients with such conditions as tuberculosis and mental diseases and indigent patients with chronic illnesses.

Several of the voluntary hospitals have excellent outpatient departments which provide care for ambulatory patients in most of the fields of medical practice. These hospitals are under contract with the Health Department for the care of indigent patients and with the Hospital Service Agency for semi-indigent ones. With some modification and closer alliance with the Health Department these clinics can adequately assume the role of Health Center, obviating the need for such centers in most sections of the District. With a new and complete central Health Center run by the Health Department and greater utilization of the outpatient departments of the contract hospitals and the Gallinger Municipal Hospital, there should be no need for the District Government to build and maintain additional and costly Health Centers.

Review of the facts found reveal that the problem of hospital care for the indigent and medically indigent seems to point toward four conclusions:

1. Inadequate reimbursement of hospitals for services rendered.
2. Inadequate budget for Bureau of Medical Assistance to furnish all care needed.
3. Rigidity of administrative procedures stultifying the program.
4. Inadequate support of teaching programs of hospitals.

Recommendations of Hospital Committee

1. To the fullest possible extent, the inpatient and outpatient facilities of the voluntary hospitals should be used for medical care of the needy; they should be reimbursed on a cost basis.
2. There should be no restrictions on inpatient care of indigent patients who have been attending the outpatient departments of the voluntary hospitals.
3. Remuneration of the voluntary hospitals for indigent medical care should be based on a cost formula arrived at by joint discussion and agreement between the hospitals and the Health Department; the rate of payment should be reappraised at yearly intervals.
4. As a result of the new policy of admitting non-emergency patients to the voluntary hospitals, the bed occupancy at Gallinger Hospital may decrease; there should be a reallocation of beds to meet the requirements of patients, such as those with active tuberculosis who cannot be hospitalized at the present time without long delays.
5. The income guide used to determine eligibility should be established with a standard budget based on current costs of living and scaled to reflect the size and composition of the family. Eligibility should be determined with consideration of the *future* income in relation to the diagnosis, prognosis, and the probable cost and duration of the illness.
6. There be constructed by the District Government a complete Health Center in the center of the District, and the outpatient departments of the voluntary hospitals and Gallinger Municipal Hospital be more fully utilized as Health Centers, obviating the construction by the District of other Health Department Health Centers.

DR. MARTIN OF VIRGINIA TO HEAD AMA IN 1954–55

As expected, the 102nd Annual Meeting of the American Medical Association in New York, June 1–5, 1953, drew a large attendance from the Washington Metropolitan Area. The meetings of the House of Delegates, June 1–4, were attended by the District Medical Society's delegates, Drs. Hugh H. Hussey and Raymond T. Holden, and by the Society's Secretary, Theodore Wiprud, and their report appears in this issue of the Medical Annals. Mr. Wiprud and Mr. Lawrence A. Zupan, Assistant Secretary of the Society, attended the 7th Annual Medical Society Executives Conference, June 1, in the Belmont Plaza Hotel. All Past Presidents of the Executives Conference, which included Mr. Wiprud, who was the first President, received citations in the form of certificates for services rendered.

The Inaugural Program was held in the Grand Ballroom of the Commodore Hotel, Tuesday night, June 2. Ceremonies were transcribed for rebroadcast on Wednesday night because radio and TV time were almost completely preëmpted Tuesday night for special reports of the British Coronation. After he had taken the oath of administration of office as President of the AMA, Dr. Edward J. McCormick, of Toledo, delivered his Presidential Address, "American Report to the Nation."

Dr. Walter B. Martin, of Norfolk, Virginia, is the new President-elect of the AMA. He will be installed as President of the Association at the June, 1954 meeting in San Francisco. He has been a member of the AMA's Board of Trustees since 1946. Dr. Julian P. Price, of Florence, South Carolina, was elected to fill Dr. Martin's unexpired term on the Board of Trustees.

Dr. Martin is a graduate of Johns Hopkins University School of Medicine (1916). He is Chief of Medical Service at the Hospital of St. Vincent dePaul and a consultant in internal medicine at the U. S. Public Health Service Hospital.

The new President-elect is a veteran of both World Wars. He reëntered the Army in May, 1942 and served as a Colonel in the U. S. Medical Corps at Percy Jones Hospital, Battle Creek, Michigan. He was medical consultant to the Fifth Service Command in 1944, then to the Tenth Army in the Pacific, and afterwards became a civilian medical consultant to the Surgeon General of the Army.

Dr. Louis H. Bauer, retiring President of the AMA, conferred the Distinguished Service Award for 1953 on Dr. Alfred Blalock, Baltimore, for his outstanding work in vascular surgery, especially for his part in the development of the so-called "blue-baby" operation. The honor carries with it a citation and gold medal.

Dr. John Enders, Boston, was named winner of the $5,000 Passano Award for his work in development of methods for culturing polio viruses in tissue.

As usual, a number of Washington physicians, including many members of the District Medical Society, took an active part in the scientific program and exhibits. The Sectional meetings they addressed and the titles of papers with authors follow:

Section on Diseases of the Chest: "Surgical Management of Benign and Malignant Tumors of the Lung Discovered in X-ray Survey," Dr. Brian B. Blades. Dr. J. Winthrop Peabody, Jr., New Orleans, whose father is a well known Washington physician and a member of the Executive Committee of this Section, was co-author of a paper relating to mediastinal tumors.

Section on Nervous and Mental Diseases: Chairman's Address: "The Development and Future of the Section on Nervous and Mental Diseases," Dr. Francis M. Forster; "The Distribution, Form and Extent of Psychiatric Consultation Services in the United States," Dr. Daniel Blain and Dr. R. Finley Gayle, Jr. (Richmond).

Section on Military Medicine: "Office of the Assistant to the Secretary of Defense (Health and Medical)—Organization and Functional Evolution," Dr. Melvin A. Casberg; "Academic Freedom in Military Medical Research," Drs. Howard T. Karsner and R. A. Phillips.

Section on Orthopedic Surgery: Panel Discussion on, Are Bone Sarcomas Curable? Dr. Murray M Copeland was a member of the panel who discussed this subject.

Section on Obstetrics and Gynecology: "The Intrapartum Initiation of Lactation Control with a Single Dose of a Long-acting Androgen (Testosterone Cyclopentylpropionate)," Drs. Samuel M. Dodek, Joseph M. Friedman, Peter A. Soyster and Harvey L. Marcellus.

Section on Pathology and Physiology: "Post-emphysematous or Phrenic Hypertension: An Analysis of 75 Cases of Chronic Asthma Complicated by Emphysema," Drs. Charles F. Geschickter and Antoinette Popovici.

Section on Anesthesiology: Cerebral Edema and Its Relationship to Barbituric Acid Poisoning," Dr. Lloyd H. Mousel, Seattle, who retains his membership in the District Medical Society.

Section on Physical Medicine and Rehabilitation: "Peripheral Vascular Disease in Geriatrics," Dr. Charles S. Wise.

WALTER B. MARTIN, M.D.
President-elect, American Medical Association

Among discussants of scientific papers at the meetings were Drs. Blades, Garnet W. Ault, Robert J. Coffey, John P. Gallagher, Zigmond M. Lebensohn and George N. Raines.

The Committee on Scientific Exhibit arranged several special features, including the special exhibits on fractures, fresh pathology and artificial respiration. Assisting the Committee in the presentation of the special exhibit on fractures was Dr. Milton C. Cobey, who demonstrated the use of Melmac waterproof plaster in fractures of the spine and wrist.

(Continued on page 390)

News and Personals

The 31st Annual Scientific and Clinical Session of the American Congress of Physical Medicine and Rehabilitation will convene on August 31, September 1–4, 1953, at the Palmer House, Chicago. All scientific and clinical sessions will be open to members of the medical profession in good standing with the AMA.

In addition to the scientific sessions, annual instruction seminars will be held. These lectures will be open to physicians as well as to therapists who are registered with the American Registry of Physical Therapists or the American Occupational Therapy Association.

Full information regarding the Session may be obtained by writing to the executive offices of the Congress, 30 North Michigan Avenue, Chicago 2, Illinois.

An institute on teaching and improving esophageal speech will be held in Cleveland, Ohio, August 10–16, at the Cleveland Hearing and Speech Center. This institute, the second one on voice pathology, is being sponsored by the American Cancer Society, National Cancer Institute of PHS, the Office of Vocational Rehabilitation, the Cleveland Otolaryngological Society, the Cleveland Academy of Medicine, and the Western Reserve University School of Medicine.

Nationally known surgeons, speech pathologists, and lay teachers of esophageal speech will conduct lectures and demonstrations and will supervise practice in teaching esophageal speech; fluoroscopic views will be used to facilitate studies of the physiology of esophageal speech.

Nonspeaking laryngectomized persons are invited to attend without charge. They may be sent by surgeons, cancer societies, societies for crippled persons, and rehabilitation services.

Limited registration is necessary. Applications should be mailed at once to Warren H. Gardner, Ph.D., Program Chairman, 11206 Euclid Avenue, Cleveland 6, Ohio.

A series of 10 short **postgraduate courses** will be conducted by the **Army Medical Service** during the fiscal year 1953–54. The courses represent an important feature of the in-service training program carried on by the Army Medical Service for Medical Corps officers. However, they also are open to a certain number of qualified civilian physicians and surgeons who wish to avail themselves of the excellent training facilities of Army hospitals and installations near their homes.

The Armed Forces Institute of Pathology and Walter Reed Army Medical Center are participating in this feature of the 1953–54 training program. The courses scheduled at these institutions are as follows:

ARMED FORCES INSTITUTE OF PATHOLOGY: Forensic Pathology, November 2–6, 1953; Pathology of the Oral Regions, March 8–12, 1954

WALTER REED ARMY MEDICAL CENTER: Seminar in Urology, September 7–9, 1953; Symposium on Circulation and Homeostasis, October 5–9, 1953; Symposium on Physical and Mental Health Standards, April 16–17, 1954; and Recent Advances in Medicine and Surgery, including Psychosomatic Aspects of Medicine and Surgery, April 19–30, 1954.

Applications for admission to any course must be submitted at least six weeks prior to the opening date. Army medical officers on active duty and fulltime Civil Service physicians at Army installations should forward their applications through channels to the Office of the Surgeon General, Department of the Army, Washington 25, D.C., Attention: Personnel Division.

Officers not on active duty may forward their applications through channels to the Army Area Commander to whose jurisdiction they are assigned. National Guard medical officers should apply under current National Guard regulations, forwarding their applications to the National Guard Bureau, Washington 25, D. C.

Physicians from other Federal agencies and other civilian physicians are advised to forward their applications to the commander of the hospital or installation conducting the course. Their selection will be based on available spaces.

The Board of Regents of the American College of Surgeons has established the first of several contemplated **scholarships in the field of research** for promising young men who are seeking a career in academic surgery, and who have recently finished or who are in the final months of their residency training program.

Although the College is able to support only one scholarship at the present time, it is believed that through the efforts of Fellows and various organizations interested in this project support of additional research scholarships will be assumed.

Candidates must obtain the approval of the chairman of the department of surgery, dean of the same medical school, and the authority of an executive officer of the university making the proposal. Preference will be given to an American or Canadian citizen.

Successful candidates will receive $20,000 over a 3-year period, to be divided as follows: $6,000 for the first year, $6,000 for the second year, and $7,500 for the third year. The medical school or institution sponsoring a successful candidate may supplement this amount with the permission of the Committee on Selection of the American College of Surgeons.

Inquiries may be addressed to the Research Scholarship Committee, American College of Surgeons, 40 East Erie Street, Chicago 11, Illinois.

The American Urological Research Foundation was organized and incorporated under a charter from the state of Ohio on April 2, 1952. Prior to establishing this organization the American Urological Association had never been in a position to receive funds for research with such contributions deductible for tax purposes. In a letter to the Secretary of the District Medical Society, Dr. William P. Herbst, a Fellow of the AUA, writes:

> "The crying need for funds for pure research in the field of urology is generally known and there are probably many individuals who will contribute, either by private donations, or through bequests. Undoubtedly there are many corporations who would gladly donate to such a worthy cause if they were aware that such contributions would be deductible from income taxes."

Members of the Research Finance Committee of the AUA constituted the original Board of Trustees of the American Urological Research Foundation, Inc., and then representatives were elected from each of the eight Sections of the AUA. The charter members of the Board of Trustees are: Dr. Charles C. Higgins, President; Dr. Carl Rusche, Vice President; Dr. Thomas D. Moore, Secretary; Dr. Reed M. Nesbit, Treasurer; and Dr. George F. Cahill.

At the meeting of the Board of Trustees in St. Louis in May, 1953, two research awards were made, one to the University of Pittsburgh and one to Columbia University. It is the object of this Research Foundation to develop along the lines of other national foundations as time goes on.

Colonel William H. Beard, flight surgeon for the District of Columbia Air National Guard, has announced **two openings on his staff.** One is for a general surgeon who carries the rank of lieutenant colonel; the other for a flight surgeon with the rank of major. They will be required to serve two Saturdays each month at Andrews Air Force Base and 15 days each summer in field training. The summer encampment this year will be held the last week of July and the first week of August at McGuire Air Force Base, near Trenton, N. J. The need for filling the two posts is urgent, Dr. Beard said, pointing out that he is required to perform all examinations alone as well as function as the senior flight surgeon for the entire 113th Fighter-Bomber Wing.

A lieutenant colonel in National Guard status receives about $1,100 per year in drill and field training pay. A major earns about $1,000 if nonrated and about $1,300 if on flying status.

Dr. Beard points out that medical officers who enter the Guard are eligible to attend Regular Air Force Aviation Examiner and other schools.

Physicians interested are urged to contact Dr. Beard either at Air Guard headquarters at Andrews Air Force Base or by telephone at Columbia 5-2122.

Mr. Arthur S. Flemming, Director of Defense Mobilization, announced, May 6, that President Eisenhower had asked the members of the Health Resources Advisory Committee of the Office of Defense Mobilization, who serve also as the National Advisory Committee to the Selective Service System, to continue in their present capacities.

Calendar of Meetings, May 16–June 15, 1953

May 18	Board of Censors
	Obstetrical Board
May 19	Grievance Committee
	Medical Committee, D. C. Cancer Society
	D. C. Chapter, American Academy of General Practice
May 20	Subcommittee on Alcoholism
	Section on Radiology
	George Washington University Medical Society
May 21	Executive Committee, D. C. Survey of Medical Care of Indigents
May 22	Joint meeting of Medical Society and D. C. Bar Association
May 25	Executive Board
	D. C. Society of Anesthesiology
	D. C. Chapter, American Federation for Clinical Research
May 26	Section on General Practice
	Commencement ceremonies, George Washington University School of Medicine
May 27	Subcommittee on Alcoholism
	Subcommittee to Review Complaints
	Committee on Social Affairs, Annual Scientific Assembly
	Committee on Public Health Exhibit, A.S.A.
	Lay Society, Diabetes Association of D. C.
	Medical Examining Board for D. C.
May 28	Washington Psychiatric Society
May 29	Ruffin Bequest Fund Committee
June 3	Graduate Nurses' Association
June 5	Staff Meeting, Episcopal Eye, Ear and Throat Hospital
June 9	Executive Committee, D. C. Survey of Medical Care of Indigents
	Medical Officers' Reserve Units
June 11	Executive Committee, Gallinger Hospital
June 12	Clinical Society, Diabetes Association of D. C.
June 15	Graduate Nurses' Association

Initially, the Health Resources Advisory Committee was established in August 1950 to advise the National Security Resources Board on the health resources of the Nation as they relate to national defense, but in April, 1952 was transferred to ODM. In a letter addressed to Dr. Howard A. Rusk, New York, Committee Chairman, President Eisenhower said:

> "The health of both our military services and our civilian population is fundamental both in peacetime and in the present emergency, and every effort must continue to be made to insure full utilization of both our civilian and military health resources."

In relaying this statement to Chairmen of State Advisory Committees, Dr. Rusk said: "In asking the National Advisory Committee to serve, the President is asking that you and your State Advisory Committee, as components of the National Advisory Committee, continue in your present capacities."

The Chairman of the D. C. Advisory Committee to Selective Service is **Dr. Maurice A. Selinger.**

At the regular meeting of the **Executive Board of the Medical Society of the District of Columbia,** May 25, approval was given to a motion that the incoming Chairman of the Subcommittee on Child Welfare be delegated to attend the Fourth National Conference on Physicians and Schools, to be held in Highland Park, Illinois, on September 30, October 1 and 2, 1953.

Mr. Willard C. Smith, Secretary of the Hospital Service Agency, had requested the appointment to its corporate membership of 21 representatives designated by the Medical Society to succeed the present incumbents. President Yater moved that the members now serving be reappointed for the ensuing year and the Board concurred. The representatives are: Drs. Frank Bacon, E. Herbert Bauersfeld, Harry S. Bernton, Charles J. Bowne, Leo T. Brown, Henry L. Colvin, Karl C. Corley, Maurice M. Friedman, James A. Gannon, Jr., Milton L. Goldman, Luther Gray, Clayton H. Hixson, Elizabeth Kittredge, David H. Kushner, Henry C. Macatee, W. Cabell Moore, W. Ross Morris, Margaret Nicholson, Leo B. Norris, John A. Reed and John U. Schwarzmann.

The Second National Convention of the American College of Cardiology convened in Washington, D. C., at the Hotel Statler on June 7, 8 and 9. The newly formed Washington Chapter of the College acted as host for the convention.

A scientific program on cardiology was given by the profession in Washington the evening of June 7. Included were papers by Dr. Donald Gregg, of Walter Reed Army Hospital; Drs. J. E. Smith and Robert Rosenbaum, of the Civil Aeronautics Administration; Dr. Edwin Boyle, National Institutes of Health; and Dr. James Watt, of the National Heart Institute.

On June 8 and 9 four scientific sessions were devoted to the diagnosis of cardiovascular diseases. Dr. Benjamin Manchester, of Washington, contributed a paper on "The History and Physical Examination in the Recognition of Heart Disease."

At the annual business meeting, June 8, Dr. Joseph Burton Glenn, President of the Washington Chapter of the College, was inducted as Chairman of the Board of Governors. Drs. George W. Calver and Irving Brotman were elected to the Board of Trustees. Members and guests who attended the annual banquet in the evening heard an address by the Honorable Stiles Bridges, Senator from New Hampshire.

The Washington Chapter held its first organizational meeting on February 22 at the Hotel Statler, with Dr. Frank L. Williman as the Temporary Chairman. Present at the meeting were 12 representatives from the Washington, D. C. area and several invited guests from the national office of the College. Dr. Glenn was elected President of the Chapter; Dr. Calver, Vice President; and Dr. Brotman, Secretary-Treasurer.

PROFESSORS EMERITI OF GEORGE WASHINGTON UNIVERSITY

Two members of the Medical Society of the District of Columbia were among the faculty of George Washington University raised to emeritus status at Commencement Exercises, May 27, 1953. DR. DANIEL L. BORDEN, Professor of Surgery, stands at the far left, and DR. PAUL F. DICKENS, Professor of Clinical Medicine, is second from the right. Other members of the faculty shown above are, left to right: MR. G. BOWDOIN CRAIGHILL, Professor of Law, DR. EDWARD H. SEHRT, Professor of German, AND DR. DONNELL B. YOUNG, Professor of Zoölogy.

Dr. Daniel LeRay Borden and Dr. Paul F. Dickens were among the five retiring professors of the faculty of George Washington University who were honored with the rank of Professor Emeritus by the University at Commencement exercises, May 27.

Dr. Borden is founder of the American Board of Surgery and Past President of the Medical Society of the District of Columbia (1940–41). He received his degree of Doctor of Medicine from the University's School of Medicine in 1912 with the highest scholastic rating in his class. He joined the faculty as Associate Professor of Surgery the same year and has served continuously in the Department of Surgery, retiring as Clinical Professor of Surgery, a position he has held for many years. Dr. Borden will continue as Director of Health Administration of the University.

Dr. Dickens is a graduate of the University of Nashville (1908). He was Professor of Medicine at the U. S. Naval Medical School from 1925 to 1938. He joined the staff of George Washington University as Associate Professor of Medicine in 1929 and has served as Clinical Professor of Medicine since 1934. During World War II he was State Chairman of Procurement and Assignment for Physicians.

Other members of the faculty upon whom was conferred emeritus status were Dr. George Bowdoin Craighill, Professor of Law; Dr. Edward Henry Sehrt, Professor of German; and Dr. Donnell Brooks Young, Professor of Zoölogy.

Special ceremonies for the 92 members of **the graduating class of George Washington University School of Medicine** were held in the Medical Society's auditorium, May 26. Invocation was pronounced by the Reverend Joseph R. Sizoo, Professor of Religion at the University; Dr. Walter A. Bloedorn, Dean of the School of Medicine, administered the Oath of Hippocrates to the members of the class. The principal address on "Challenge of Being a Physician" was given by Dr. Joseph H. Roe, Professor of Biochemistry.

Three awards were presented during the ceremony: to Dr. David James Pillow, the Oscar Benwood Hunter Award in Pathology, an award of $100 established by a trust fund set up by the George Washington University Medical Society, and the John Ordronaux Prize; Dr. Gerald A. Oilschlager received the Kane-King Obstetrical Society award of a year's subscription to a medical journal.

The Class of 1953 was the largest to graduate from the School of Medicine in regular session.

The American Therapeutic Society held its **54th Annual Meeting** at The Biltmore in New York, May 28–31. Dr. Oscar B. Hunter, Jr. gave his Secretary's Report at the business meeting on Friday morning, May 29. The following scientific papers were contributed by Washington physicians:

"Endocardial Sclerosis," Dr. William L. Howell
"A New Conception in the Prevention of Early Abortion," Dr. Richard H. Fischer
"Cortisone Effect on Immunity Responses," Dr. Hunter
"Priscoline, Regitine and Roniacol in the Treatment of Diabetic Arteriosclerosis," Dr. James M. Moss
"The Use of Radioactive Colloidal Gold (AU^{198}) in the Management of Pleural Effusions Associated with Malignancy," Dr. Frank S. Ashburn

Dr. W. H. Sebrell, Jr., Director of the National Institutes of Health in Bethesda, Md., invited a group of Washington physicians and interested laymen for a special tour of the new **Clinical Center,** which is scheduled to admit patients on July 1. Among those who made the tour of inspection were Dr. Wallace M. Yater, President, Dr. Herbert P. Ramsey, President-elect, and Theodore Wiprud, Secretary, all of the District Medical Society, and Dr. Frank E. Wilson, Director of the Washington Office of the AMA.

Dr. William B. Walsh is the new President-elect of the **National Medical Veterans Society,** which held its first national meeting in New York, June 27, prior to the meeting of the AMA. Dr. Walsh will be installed as President at the San Francisco meeting to be held in June, 1954. He will retain his office as Chairman of the Legislative Committee of the Society.

Dr. Oscar B. Hunter, Jr., who is Chairman of the Committee on Veterans' Affairs, was elected to the Society's Steering Committee. Dr. Hunter was Chairman of the Arrangements Committee for the New York meeting.

The George Washington University Medical Society held its annual business meeting and election of officers, May 20, in the Medical Society's building. The following officers were elected for the ensuing year:

Dr. Luther H. Snyder, *President;* Dr. Leland E. Stevenson, *President-elect;* Dr. Robert R. Montgomery, *First Vice President;* Dr. Naomi M. Kanof, *Second Vice President;* Dr. Richard H. Fischer, *Secretary-Treasurer;* Dr. Herman S. Hoffman, *Councilor for 5 years.*

Dr. Hoffman, the retiring President, delivered his Presidential Address at this meeting; reports of committees were read and approved. Members enjoyed a buffet supper.

The District of Columbia Bar Association was host to the Medical Society of D. C. at a joint meeting in the latter's auditorium, May 22. Dr. Wallace M. Yater, President of the District Medical Society, gave an address on "Washington's Health Needs." In his talk Dr. Yater outlined the findings of the District of Columbia Survey on the Medical Care of Indigents.

The Honorable Leo A. Rover, United States Attorney for the District of Columbia, spoke on "Need for Psychiatric Help for the Courts of the District of Columbia."

Refreshments were served in the Library at the conclusion of the program.

The Section on General Practice met in the Medical Society's building, May 26, for a scientific session and election of officers. About 50 members were present. Dr. Arthur A. Morris, neurosurgeon, gave a talk on "Convulsive State of Patients Seen in General Practice." Elected to serve as officers for 1953–54 were:

Dr. I. Phillips Frohman, *Chairman;* Dr. Stewart Clapp, *Vice Chairman;* Dr. W. Robert Perkins, *Secretary-Treasurer.*

The Section on Otolaryngology of the Medical Society of the District of Columbia held a scientific meeting and election of officers at the Army-Navy Club, May 19. Dr. Oscar Swineford, Professor of Allergy, University of Virginia, gave a talk on allergy relating especially to the nose and sinuses. Following the scientific session a business meeting was held and the following officers were elected for 1953–54:

Dr. John Louzan, *Chairman;* Dr. Willard B. Walters, *Vice Chairman;* Dr. J. L. Levine, *Secretary;* Dr. Russell S. Page, Jr., *Treasurer.*

The Section on Radiology, at its last business meeting, elected the following officers to serve from May 1953 to May 1954:

Dr. Henry A. Monat, *Chairman;* Dr. Sidney C. Cousins, *Vice Chairman;* Dr. William T. Gibb, *Secretary-Treasurer.*

This was the last meeting of the season. The next will be held in the early fall.

The Section on Gastroenterology held a dinner meeting at the Chevy Chase Club, May 11. The following officers were elected for 1953–54:

Dr. Alfred A. J. Den, *Chairman;* Dr. David H. Rosenfeld, *Vice Chairman;* Dr. Alvin C. Wyman, *Secretary.*

Dr. R. Lomax Wells, Medical Director of the Chesapeake and Potomac Telephone Company, was elected President of the **District Tuberculosis Association,** May 13, succeeding Mr. Charles E. Bish, Principal of McKinley High School.

Dr. Howard M. Payne, Professor of Medicine, Howard University School of Medicine, was elected a member of the Executive Committee.

Rear Admiral Bertram Groesbeck, Jr., MC, USN, Commanding Officer of the National Naval Medical Center, was installed as **President of the Aero Medical Association** at Los Angeles, May 13, succeeding Dr. William R. Stovall, Washington. Admiral Groesbeck will preside at the 25th anniversary meeting of the Society in Washington in 1954.

Mrs. W. R. Stovall, wife of the retiring President, was elected President of the Wives' Wing, the ladies auxiliary of the Association. Mrs. Groesbeck will serve as Honorary President of the Wing.

Dr. William P. Herbst, President of the District Social Hygiene Society, was the principal speaker at a luncheon in the Hotel Statler, May 19, marking the 35th anniversary of the District Society and the 40th anniversary of the American Social Hygiene Association.

Mr. Ray H. Everett, Executive Secretary of the Society, relayed greetings from President Eisenhower and spoke briefly.

Dr. Herbst was reëlected President and member of the Board. Other physicians elected to the Board of Directors were Drs. Daniel L. Seckinger, Robert Scott Lamb, Paul B. Cornely and Edith S. Coale.

The District of Columbia Chapter of the American Academy of General Practice elected officers for its organization year, 1953–54 at its meeting, April 19, in the Medical Society's building. They are:

Dr. Lewis A. Klein, *President;* Dr. Maurice J. Kossow, *Vice President;* Dr. Samuel Diener, *Secretary-Treasurer.*

Dr. Diener and Dr. Frank S. Pellegrini were elected delegates to the Cleveland Convention of AAGP, and Drs. Richard V. Mattingly and Millard Ottman, alternate delegates. Elected to the Board of Directors were Drs. Herbert S. Gates, Richard V. Mattingly and Sherman A. Thomas.

The following physicians will serve as officers for the **Jacobi Medical Society** during 1953–54:

Dr. Irvin Hantman, *President;* Dr. Lawrence J. Thomas, *Vice President;* Dr. William Lewis, *Secretary;* Dr. Harold Sterling, *Treasurer;* Drs. Louis K. Alpert and Herbert A. Goldberg, *members of Executive Committee.*

Dr. Anthony Zappala, who has served as Assistant Director of the **Alcoholic Rehabilitation Program** since April, 1950, has been appointed Director to succeed Dr. E. Leopold Wexberg. Dr. Wexberg will devote his full time to the Bureau of Mental Hygiene of the Health Department, of which he is Director.

Dr. Zappala graduated from George Washington University School of Medicine in 1942. He interned at Providence and St. Elizabeths Hospitals. From 1943 to 1946 he served in the Army Medical Corps. He continued his postgraduate training for two years at St. Elizabeths Hospital upon his separation from service. Dr. Zappala is Vice Chairman of the Medical Society's Subcommittee on Alcoholism.

At its convention in New York City, May 28–31, **the American College of Chest Physicians** conferred Honorary Fellowship upon Rear Admiral Lamont Pugh, Surgeon General of the Navy; Major General George E. Armstrong, Surgeon General of the Army; Major General Harry G. Armstrong, Surgeon General of the Air Force; Dr. Leonard A. Scheele, Surgeon General of the Public Health Service; Vice Admiral Joel T. Boone, MC, USN (Ret.), Chief Medical Director of the Veterans Administration; and Dr. Paul D. White, Boston, Executive Director of the National Advisory Heart Council.

Dr. Francis J. Fabrizio took office as President of the **District of Columbia Dental Society,** July 1, succeeding Dr. William Brown Ingersoll. Dr. Fabrizio graduated from the Georgetown University School of Dentistry in 1935, where he is Associate Professor of Periodontia. He is a Fellow of the American College of Dentists, Fellow of the International College of Dentists, and a diplomate of the American Board of Periodontology.

Dr. Karl Hayden Wood was elected President-elect, June 9, and will take office in 1954. He is a graduate of the Georgetown Dental School and is Director of Oral Surgery at George Washington University Hospital.

Dr. John A. Reed was reëlected Secretary of the American Diabetes Association at its annual meeting in New York, May 30–31.

A citation for distinguished service to the Alumni Association of the University of Kansas has been awarded to **Dr. Brian Blades,** Professor of Surgery, George Washington University School of Medicine. Dr. Blades graduated from the University of Kansas with a Bachelor of Arts degree in 1928, and received his medical degree from Washington University (St. Louis) in 1932. He has been a member of the faculty of George Washington University since 1946.

Dr. Vasilios S. Lambros, Washington neurosurgeon, was among the 93 students of George Washington University Law School who received the degree of Bachelor of Laws at Commencement exercises, May 27, at the University. Dr. Lambros received his medical degree from Georgetown University in 1939.

Dr. James Alexander Lyon was one of eleven alumni of Ohio University who received special recognition recently from the Alumni Association; six were honored for their contributions to the University and to the Alumni Association and five for achieving distinction in some field of personal endeavor. Selections were made by the officers and executive committee of the Alumni Association, following recommendations made by Alumni Chapters throughout the Nation.

Dr. Lyon's award was for distinguished attainments in the fields of internal medicine and cardiovascular diseases. The award, in the form of a certificate, was presented to him at the annual Alumni reunion luncheon, June 6, in the Scott Quadrangle dining room at Athens, Ohio.

Dr. Irving B. Brick, Assistant Professor of Medicine, Georgetown University School of Medicine, and Chief of the Gastroenterology Clinic of Georgetown University Hospital, has been elected to membership in the American Gastroenterological Association.

Dr. Everett J. Gordon, orthopedic surgeon, recently completed an intensive postgraduate course in upper extremity prosthetics at the College of Engineering, University of California at Los Angeles. Dr. Gordon is now participating in a Nation-wide research program, sponsored by the National Research Council, to coördinate the study and prescription of artificial arms and appliances.

The 101st Annual Convention of the District of Columbia Pharmaceutical Association was held, June 9 and 10, at the Shoreham Hotel. Among the honored guests at the President's Luncheon, June 10, were Dr. Wallace M. Yater, President, and Theodore Wiprud, Secretary, of the D. C. Medical Society. Mr. Aaron A. Paulson, President of the Pharmaceutical Association, presided during the luncheon program.

Dr. Edward J. Stieglitz addressed the medical staff of the Veterans Administration Hospital at Perry Point, Md., May 21, on "Causation of Mental Illness in Later Maturity." The following day he took part in a Postgraduate Course in Industrial Medicine sponsored by the New York University Postgraduate Medical School. Dr. Stieglitz' subject was "The Older Worker."

He also delivered three lectures in the same field to the medical staff of the Milledgeville State Hospital in Milledgeville, Pa., April 10 and 11.

Dr. Milton C. Cobey was invited to attend the North Carolina State Medical Meeting at Pinehurst on May 10–13, where he presented his exhibit on Melmac waterproof plaster.

Dr. Cobey read a paper on the subject of plastics in the treatment of arthritis to the American Rheumatism Association, May 28, at the Waldorf-Astoria, in New York.

Dr. Ralph M. Caulk, senior attending radiologist of Garfield Memorial Hospital, was one of the guest speakers at the Seventh Annual Rocky Mountain Cancer Conference held at the Shirley-Savoy Hotel in Denver, July 8 and 9. Dr. Caulk was the first speaker in a Symposium on Hematuria, July 8. The subject of his address was "The Problem of Cervical Cancer as Viewed by a Radiotherapist."

Dr. Lloyd G. Lewis, who has served as Director of the Department of Urology at Georgetown University School of Medicine, has resigned his position in order to devote more time to private practice, research and writing. He will continue to serve on the Georgetown medical staff as Clinical Professor of Urology.

Dr. Harold Jeghers, Professor of Medicine, Georgetown University School of Medicine, addressed the Hartford Medical Society in Hartford, Conn., April 20, on the subject, "Differential Diagnosis of Jaundice and Liver Function Tests." On the same day he also gave an amphitheatre clinic on "Indications and Contraindications for Surgery during Jaundice" at the St. Francis Hospital in Hartford.

On April 21 Dr. Jeghers presented an amphitheatre clinic for the house staff of the Department of Medicine of the New Haven Hospital in New Haven, Conn., and gave a similar clinic for the house staff at Boston City Hospital on April 22.

Theodore Wiprud, Executive Director of the Medical Society of the District of Columbia, was invited to talk on his work as the executive officer of the Society before the employees of the Professional Business Services. The meeting was held, June 10, at the home of Mr. John C. Post, Director of the Services, following a buffet supper.

The Metropolitan Washington Industrial Nurses' Association devoted its meeting, June 2, which was a dinner meeting at the Highlands Apartment dining room, to a consideration of the health problems of the working woman. **Dr. John L. Parks,** Professor of Obstetrics and Gynecology, George Washington University School of Medicine, was guest speaker; he spoke on "Gynecology and Health."

Captain William Tenenblatt, MC, USA, is currently engaged as Chief of the Department of Obstetrics and Gynecology at Fort Meade, Md. Dr. Tenenblatt was recently certified by the American Board of Obstetrics and Gynecology after successfully completing his examinations in Chicago.

Dr. Nicholas G. Pistolas has given up his practice of pediatrics and will take a residency in ophthalmology at Episcopal Eye, Ear and Throat Hospital beginning August 1.

Dr. William Kellow completed his tour of duty with the U. S. Air Force and has returned to Washington to join the staff of the Glenn Dale Sanatorium. While stationed at the Air Force Hospital at Beale Air Force Base, Calif., Captain Kellow was Chief of Medical Service.

Dr. Daniel L. Finucane, Superintendent of Glenn Dale Sanatorium, addressed the **51st Annual Meeting of the District of Columbia Tuberculosis Association,** May 4, on "The Changing Concepts in the Treatment of Tuberculosis Since the Introduction of the Antituberculosis Drugs." The meeting was held in the Burlington Hotel.

Dr. Frederick C. Fishback was reëlected to its Board of Directors and **Drs. James J. Feffer and J. Winthrop Peabody** were elected to serve on the Board.

BOOK REVIEWS

The Psychiatrist and the Law. The Isaac Ray Award Book. Winfred Overholser, M.D., Sc.D., Superintendent, St. Elizabeths Hospital; Professor of Psychiatry, George Washington University School of Medicine; Past President, American Psychiatric Association. Price, $3.50. Pp. 147. New York: Harcourt, 1953.

In 1838 Dr. Isaac Ray, one of the great pioneers of American psychiatry, published "A Treatise on the Medical Jurisprudence of Insanity," which became one of the medico-legal milestones of the 19th century. One hundred and fourteen years later the American Psychiatric Association in 1952 established the Isaac Ray Award in his honor to be given annually for the most worthy "contribution to the improvement of the relations of Law and Psychiatry." Dr. Winfred Overholser, Superintendent of Saint Elizabeths Hospital, and a very active member of the Medical Society of the District of Columbia, was selected to be the first so honored.

This compact and beautifully written volume consists of the four Isaac Ray Lectures which Dr. Overholser delivered last November before the Schools of Law and Medicine of Harvard University. The simple, informal lecture style makes this book a pleasure to read. It is a refreshing introduction to the thorny relationship between psychiatry and the law. The reader is impressed by the well-documented scholarship, which is relieved from time to time by many humorous as well as illuminating examples drawn from the author's rich background in forensic psychiatry.

Dr. Overholser divides his book into four main sections. The first section is an unusually clear and concise statement concerning psychiatry as a medical science, its history, and the illnesses it considers. Few writers have been able to condense such a broad field into so few pages with such telling skill. In this reviewer's opinion, the author has merited the Isaac Ray Award for this chapter alone.

In the second section the author points out the main differences in viewpoint which have erected such formidable obstacles to a closer *rapprochement* between psychiatry and the law. Chief among these differences has been "the tendency of the law to preserve the status quo, or at least, to move slowly in the acceptance of . . . scientific data." This is well illustrated by citing a case of bastardy which was being considered by an elderly judge. "Since the question of the length of pregnancy was a point at issue," the author writes, "he (the judge) was looking up the matter in an ancient law dictionary which quoted as authority Lord Coke. It occurred to me at the time that possibly a modern textbook on obstetrics would be more to the point!" This section also considers the many weaknesses of the famous "McNaghten Rules," the effect of the witness's mental state on the credibility of his testimony, the problems of testamentary capacity, and the unsoundness of the legal "all-or-none" rule when forcibly applied to psychiatry.

"The Mental Patient and the Hospital," which comprises the third section, contains a first-rate discussion of the various laws and regulations governing the admission and discharge of the mentally ill patient. Here the author pleads for more humane and enlightened legislation which would make treatment in a mental hospital just as accessible to the mentally ill as treatment in a general hospital is to the physically ill. It is somewhat disconcerting to learn that in 1869 Isaac Ray defined the objectives of an ideal commitment law in a way which cannot be improved today. The wheels of progress grind exceeding slow!

The last section deals with "The Psychiatrist as Witness," and it is here that Dr. Overholser discusses the many pitfalls of courtroom psychiatry chiefly responsible for its present state of disrepute. Although he has tried to be meticulously impartial from the start, until now the brunt of his criticism has fallen squarely on the legal profession for its failure to catch up with and make use of the advances in psychiatry. This may cause some readers (notably lawyers) to gather the false impression of a partisan approach. This is not so. In this last section the accusing finger points with equal vigor at the few but vocal unqualified or unethical psychiatric "experts" as it does at the outmoded, cumbersome and often exasperating legal procedures supposedly designed to obtain truth and justice.

Despite the limited objectives of the book one cannot but regret that the complex problem of criminal responsibility is only briefly mentioned. It is hoped that Dr Overholser will soon be moved by the warm reception accorded this volume to give us the benefit of his clear thinking on this and other challenging problems in forensic psychiatry.

Those readers who are sensitive to format will find "The Psychiatrist and the Law" an excellent example of the book designer's art. The type, page margins, and cover are in impeccable taste. The arrangement for references in a separate section at the end avoids the annoying distraction of footnotes at the bottom of each page. Altogether a handsome addition to one's library.

This book will appeal and should appeal to a large audience. The intelligent lay reader will find in it an astounding amount of information—ranging from the courageous testimony of Johannes Weyer in 1572 to the psychiatric aspects of the trial of Alger Hiss. The physician and lawyer will find it particularly rewarding. Social workers, clergymen, and all others working with people in trouble and who have been perplexed by the present state of confusion in the relationship between psychiatry and law will find sound guidance.

Publication of this volume firmly establishes Dr.

Overholser as the American Dean of Forensic Psychiatry.

Z. M. Lebensohn, M.D.

Bacterial and Mycotic Infections of Man, 2nd ed. Edited by René J. Dubos, Ph.D., The Rockefeller Institute for Medical Research. Price, $7.50. Pp. 886, with 98 illustrations. Philadelphia: Lippincott, 1952.

This treatise is beautifully edited, attractively arranged and in addition is extremely informative. It is the coöperative effort of 37 experts and covers almost the entire field of medical microbiology, that is, the study of the host and the parasite and the role that this relationship plays in the development of infectious diseases. Indeed, this work is not concerned with bacteriology alone, but rather relates this basic science to the clinical field. For this reason, all practitioners of medicine will find it useful and practical. The latest developments in the principles of chemotherapy of infections have been included. In addition to separate chapters devoted to each of the bacteria, actinomycetes and pathogenic molds there are sections covering the morphology and physiology of bacteria, serology and immunochemistry, human blood groups, the allergic state, principles of sterilization, and principles of epidemiology. One of the most valuable chapters covers applied medical bacteriology, in which there is described the important infectious processes based on their distribution in the various regions of the body rather than on the basis of the causative microörganism. In this section there is also included the many special and indirect methods of diagnosis of infections. Medical students, bacteriologists and practicing physicians will find this volume invaluable.

Sol Katz, M.D.

Viral and Rickettsial Infections of Man, 2nd ed. Edited by Thomas M. Rivers, M.D., Director of the Hospital, The Rockefeller Institute for Medical Research. Price, $7.50. Pp. 736, with 90 illustrations including 7 plates in color. Philadelphia: Lippincott, 1952.

This is the second edition of a book which is the companion volume to "Bacterial and Mycotic Infections of Man" and should appeal as a complete, authoritative reference book. It is a thorough review and includes all the recently acquired knowledge in the viral and rickettsial fields written by 30 specialists. There are new chapters on the human reactions produced by the Coxsackie virus, hemagglutination by viruses and interference between viruses. There is also included discussions on epidemic viral gastroenteritis, cat-scratch disease, generalized salivary-gland virus infections, and encephalomyocarditis. A very useful chapter on the diagnosis of viral and rickettsial infections integrates clinical manifestations, epidemiology, and diagnostic laboratory procedures.

The format is excellent, the bibliography complete, and the price reasonable.

Sol Katz, M.D.

Pinworm and Ascaris Infestation—Kelly and Scott

(*Continued from page 352*)

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Disseminated Histoplasmosis—Alexander and Bakir

(*Continued from page 361*)

little clinical value, though it may be of considerable value to the epidemiologist.

The histoplasma organisms can easily be overlooked in a routine examination of biopsy specimens, as illustrated here by the original report of a "non-caseating granuloma consistent with sarcoid." Subsequent review of these sections disclosed the intracellular fungus.

The fungus was cultured without difficulty from the splenic pulp aspirate and bone marrow. All blood cultures were reported negative, probably because they were not kept for a sufficient length of time.

There is no convincing evidence that the course of histoplasmosis is altered by any antibiotic or chemotherapeutic agent. In the present case the patient failed to respond to a derivative of isoniazid and streptomycin.

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Delegates' Report on AMA Meeting

(*Continued from page 371*)

Treasurer:

J. J. Moore, M.D., Chicago, Illinois

Speaker of the House of Delegates:

James R. Reuling, M.D., Bayside, New York

Vice Speaker:

E. Vincent Askey, M.D., Los Angeles, California

Trustees:

Edwin S. Hamilton, M.D., Kankakee, Illinois
Gunnar Gundersen, M.D., LaCrosse, Wisconsin
Julian P. Price, M.D., Florence, South Carolina

Respectfully submitted,
Hugh H. Hussey, M.D., *Delegate*
Raymond T. Holden, M.D., *Delegate*
Theodore Wiprud, *Secretary*

Medical Bowlers

(*Continued from page 372*)

Providence	Dr. Bruno Floria	100–37
Sibley No. 1	Dr. George L. Ball	106–5
Sibley No. 2	Dr. Morse	104–36
Suburban	Dr. R. Irey	100–25

Officers of the Bowling League are: Dr. VanKinsbergen, President; Dr. J. Earl Kadan, Vice President; and Mr. William B. Cochrane, Secretary and Officer Scorer. Physicians or dentists wishing to join the League next season should register with one of the officers.

Annual Meeting of AMA

(*Continued from page 379*)

Various hospitals, medical schools, and laboratories in the New York area assisted the Section on Pathology and Physiology in presenting an exhibit on fresh pathology. Interesting specimens were collected daily and rushed to Grand Central Palace by special messenger. Demonstrations were conducted continuously throughout the week by outstanding pathologists, including Colonel Joe M. Blumberg and Dr. Frank W. Konzelmann, both of Washington.

The Section on Military Medicine included a scientific exhibit on "Electroencephalography in Combat Head Injuries" by Captain G. N. Raines, MC, USN, and Comdr. William F. Caveness, MC, USNR, Bureau of Medicine and Surgery, Navy Department.

The Section on Pathology and Physiology presented an exhibit on "Bacterial Resistance in Antibiotic Therapy" by Colonel Dwight M. Kuhns, MC, USA, Office of the Surgeon General; Dr. Matthew H. Fusillo, Walter Reed Army Hospital; and Dr. Monroe J. Romansky, George Washington University School of Medicine.

Champion of the 1953 American Medical Golfing Association tournament is Dr. Gerald F. Dederick, Jr., Hackensack, N. J., who won the title for his 76 strokes on the Siwanoy Golf Club course, June 1. Among the three runners-up was Dr. William J. Evans, Washington. Dr. Charles Hageage, Mt. Rainier, Md., was one of the golfers in Class C who were presented with awards at the evening banquet in the Clubhouse.

MEDICAL ANNALS
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VOLUME XXII *August, 1953* NUMBER 8

WHEN INDUSTRY AND MEDICINE MEET

LEMUEL C. McGEE, M. D.

Medical Director, Hercules Powder Company; Attending Chief, Medical Division, Delaware Hospital, Wilmington

THERE can be no healthy atmosphere for business without a healthy atmosphere for employees. It is becoming more evident that employee health is of primary concern to industrial management. Surveys of the health needs of men and women on the Nation's industrial rolls show that the greater opportunity for constructive medicine lies in the broad field of preventive medicine rather than in the field of curative medicine. This emphasis is seen in the definitions of industrial medicine i.e., "the practice of medical supervision, preventive medicine and public health within the confines of an industry"; "the practice of medicine applied to the prevention and alleviation of sickness, injury and physical deterioration among industrial workers"; "a science which deals with prevention, cure and alleviation of disease as it affects gainfully employed individuals".[1]

The objectives of industrial medicine are (1) to fit the worker to types and quantities of work commensurate with his ability to perform such work without health impairment or injury to himself or his fellow workers, (2) to prevent occupational disease or injury by the exercise of proper control over working conditions, (3) to conserve the health of the worker through individual medical supervision and education, and (4) to restore to health the worker suffering from occupational disease or injury. These objectives are approached by the physician through a knowledge of, and a voice in the control of the plant environment (industrial hygiene) on the one hand and through the individual worker (clinical medicine) on the other.

The services which have been developed by industrial medical departments to further these recognized objectives are many. Some are obvious and well known to physicians. Other services are less well known, having arisen during the process of fitting the health program to the needs of specific plant groups.

MEDICAL EXAMINATIONS

Physical examinations given to applicants for employment form the basis for sound recommendations on the proper placement of workers. Such examinations rather than being a bar to employment have enabled countless thousands of individuals with significant mental and physical handicaps to find places in industry where they work productively and healthfully. The consideration of suitability for specific types of work should also be given when workers are transferred from one job to another after employment.

Medical reëxaminations of employees at suitable intervals are growing in popularity. While physicians have long recognized the advantages of the periodic health check-up of ostensibly well individuals, it remained for industry to "sell the program" to enable physicians to apply this procedure to sizable groups of people. Such examinations are now given to employees during minor illnesses, upon return to work from more serious illnesses, during changes in working conditions, upon job transfers, and upon the request of the employee for any reason. The last named examination has been particularly useful in the early detection of incipient disease. The character of the periodic examination is dictated by its special purpose, i.e., whether for food handlers, for communicable disease detection, for workers in lung irritants, hepatotoxic solvents, cholinergic phosphorus-containing insecticides, or other potential exposure.

Value to Employee

When properly conducted, the examinations benefit the employee by affording early recognition of incipient disease; eliminating anxiety over trivial conditions, i.e., unimportant peculiarities of the individual worker which are without health import; protecting against contagious disease at work; preventing the worker from being assigned to work which is beyond his physical abilities; protecting against disease arising from occupation; promoting the correction of remediable physical defects; providing an opportunity for health education.

The examining physician should be one who has a wholesome appreciation for the limitations as well as the technic of the periodic health interview for health maintenance. The ability to take a good medical history and gain the confidence of the worker is basic. The physician should have a persuasive personality; he should be one who can convince others of the worthwhileness of a given course of action. He should be of high moral and intellectual integrity, one who is unwilling to compromise his medical opinion for any consideration other than the best health interest of the employee. An interest in health examinations and professional competence of the physican are factors which outweigh such considerations as how his services are obtained, i.e., whether company-employed, clinic staff member, or independent practitioner. It is my opinion that those performing periodic health examinations should not do such work as their only medical activity but should combine it with the care of the sick. A few hours in the examining room leads to a loss of keenness in powers of observation due to boredom and fatigue.

Unless the examinee accepts the principle that the interview is for his benefit, there may be an understandable reluctance by him to disclose his complete medical history. The interview should be conducted in complete privacy, and the information obtained should be used only as in proper and long-accepted physician-patient relationships. Importance is to be attached to the family health history, metabolic disorders, infectious diseases, allergies, circulatory and respiratory function, digestive disturbances, living habits at work and play, psychologic and behavior eccentricities, self-medication record, previous notations on the individual's health record, and occupational and other environmental influences.

The frequency of periodic examinations varies with the age and sex of the industrial employee, the nature of the specific occupation, the presence or absence of latent disease, and individual health handicaps. There is a need for older workers and those in hazardous occupations to be examined at more frequent intervals. The interval between examinations most often reported for workers under medical supervision in nonhazardous occupations is 1 year. In so far as age affects the frequency of the examination, one proposed schedule is as follows:

Under 30 years of age	every 3 years
Age 30–40	every 2 years
Age 40–60	annually
Over 60 years of age	semi-annually

There can be, however, no ideal arbitrary interval between examinations for a group of people. Individualization is necessary. What is important is the establishment of confidence in the examiner and a willingness of the industrial worker to report any evidence of impairment of his well-being promptly so that whatever re-examination is necessary may be given without delay. The character and frequency of examinations to be recommended for workers are best determined after a study of the needs of the group by a physician experienced in industrial hygiene and the operation of industrial health programs. Such consultation and advice based on experience are available in the Nation's industrial areas.

It must be accepted by anyone using medical report forms that no form can be devised to fit, optimally, each examinee. Report forms are used widely in industry to serve 3 purposes: (a) to furnish a written record of an examination, (b) to provide the examiner with a check list of basic essentials in the interview and examination, and (c) to allow statistical compilation of facts gleaned by many different examiners through uniformity of reporting forms.

The Use of Laboratory Procedures

Two approaches to the selection of laboratory procedures for use with the periodic health examination are currently found in industry. Both have elements of usefulness to recommend their employment in suitable groups. These are:

1. A battery of screening tests devised for speed and low-cost application to large groups of people without individual selection by interview and physical examination. Such tests are photofluorograms of the chest, blood serology, blood sugar estimations, erythrocyte sedimentation tests, and urinalyses.
2. Procedures selected by the physician after obtaining the history and physical examination of the man interviewed in a health check-up. This is the individual approach sanctioned by long experience of medical practice in dealing with the man with a complaint, i.e., the patient. With the ostensibly well person the physician may not find the clue of a complaint or physical finding to guide him in selecting laboratory procedures.

Basically, a urinalysis and hemoglobin estimation or blood count are recommended. Until syphilis is brought under control, blood serology should be had at intervals (depending upon community incidence) for case-finding. Many industrial groups receive chest surveys at intervals of 18 to 24 months (or oftener in suspected minimal or known arrested cases of pulmonary tuberculosis). An electrocardiogram, especially on men over 40 years of age, has been helpful in revealing unsuspected evidence of cardiovascular disease.

Additional laboratory or roentgenographic tests are dictated by the judgment of the physician in selected workers. In special examination programs for executives certain groups receive some blood chemistry (e.g., urea nitrogen and blood sugar), sigmoidoscopic and stool examinations, and gastrointestinal X-ray examinations, in addition to the above, as part of the routine study.

The Interview after the Examination

Every lay person needs advice on health consonant with his ability to understand it and follow it. The examinee understandably expects some comment from the physician on the results of the examination. Whenever illness is discovered, the character of the medical advice is clearly indicated. Even in minor deviations from health there is need for explanation of their significance by the physician. Early obesity, eating habits, use of laxatives, dental and gingival disease, skin disorders, smoking and drinking habits, emotional states, and posture are excellent and frequently recurring starting points for health counseling.

The preventive potentiality of advice resulting from a health examination appeals to intelligent persons. The lay person has but a hazy idea of what he requests when he wants "an examination." He has an inadequate concept of what the physical examination and laboratory procedures can and cannot accomplish in his behalf. The layman is unduly impressed by the number of objective tests which he receives—blood removed from his arm or finger, X-rays, and the electrocardiogram; he is less impressed by the history and physical survey, by the composite judgment of the physician that is the culmination of what has gone before.[2] It is the physician's responsibility to explain, lay proper emphasis, and to assure himself that his advice is understood by its recipient. The examination cannot reliably forecast the detail of future disease. The examiner frequently can suspect the general pattern of future physical changes, however. Routine written reports to the layman are subject to misinterpretation and are not recommended as a substitute for the personal interview. For the full fruition of this form of preventive medicine the man examined must act on the advice and his personal physician or consultant must know the pertinent findings which call for further medical attention or treatment.

Compensation laws require that medical service be provided for injury and disease arising out of occupation. This is done by referral in most instances. In isolated industrial operations it becomes necessary to plan for medical treatment because of the absence of community facilities for the care of injured or ill workers through referral.

The treatment of injuries or illnesses not industrially induced is the particular function of private medical practice. The Council on Industrial Health, American Medical Association,[3] has found but 3 situations which call for medical attention at the plant in nonoccupational illness:

1. Minor illness which temporarily interferes with an employee's comfort or ability to finish a work shift and for the relief of which he may need immediate medical attention.

2. First aid measures for urgent sickness. The physician in industry should employ such measures as the emergency dictates in urgent sickness occurring during working hours on the working premises, until such time as prompt notification of the family physician relieves the first physician of further responsibility.

3. Rehabilitation after sickness and injury. The physician in industry may properly assume responsibility for those phases of rehabilitation after disability which progress best under controlled working conditions. These procedures in retraining on the job are best undertaken in collaboration with the worker's personal physician or the specialist who has directed the definitive care of the patient while he was unable to work.

There is frequent opportunity in industry to emphasize and support the work of the employee's personal physician. A classical example is seen in the diabetic patient who is negligent in his dietary-insulin régime, who delays his check-ups by the physician responsible for his management. Wherever the industrial medical department maintains close contact with employees and has adequate information on their physical condition, the industrial physician is in a position to furnish medical information to the employee's personal physician when such information is desired.

Guidance for employees to enable them to secure medical, surgical and dental attention which they require has yielded good returns in early diagnosis, in timely correction of health impairments.

INDUSTRY—PHYSICIAN TEAMWORK

Other aspects of a satisfactory medical program in industry deserve mention. Management welcomes assistance on the manifold problems of retirement. With our aging population and the recognition of the useful work which can be performed by the older worker there is a tendency to disregard a fixed age—a purely chronological criterion—in proposing retirement. Psychologic preparation for retirement and the selection of those who should retire because of incapacitating permanent disability are important functions of the physician.

The physician in industry needs to know something of the materials used and the processes involved in the plant. This takes him on inspection tours to learn the physical hazards of the plant. Through coöperation with safety engineers he can assist in bringing about improved working conditions, better preparation for emergency measures in life-saving, resuscitation and prompt care for injured employees.

Manufacturers increasingly are turning to the physician for advice concerning the influence of industrial products on the health of the consumer. This is particularly important in the manufacture of materials to be used in contact with the human skin, to be inhaled during use, or to be ingested as a constituent of food. Toxicologic investigations must be planned to answer practical questions on various hazards from new materials and from new uses of older and ostensibily better known materials.

Not the least important obligation of physicians who are privileged to be closely associated with workers is that of collecting new knowledge from medical records. Within industry one has a splendid opportunity to study the incidence of disease and its natural history, the pattern of the progress of degenerative changes, the process of aging, the effect of medical service procedures, and the impact of sickness insurance and other benefit plans on our society.

It has been demonstrated by experience that the physician can contribute much to the equitable administration of our compensation laws. Both deserving claimants and fair-minded management welcome assistance in compensation claims. Industrial disabilities are frequently of a nature which calls for the appearance of physicians who are acquainted with industrial processes at compensation hearings.

CONCLUSIONS

Industrial medicine today is one of the most important services influencing the health of the American people. Medical personnel in industry are increasing, but the needs still are not filled. Thousands of small plants should have in-plant medical supervision, on a part-time basis, from physicians who understand industrial medicine. Too often the smaller plant has little or no health supervision. It would seem that the prevailing opinion among executives of small plants is that an in-plant medical service is either unavailable or its cost is more than a small plant can pay. An analysis of the labor force a few years ago showed that of every 100 workers, 40 worked in plants employing less than 50 individuals; another 31 worked in plants employing 50 to 499 persons. Thus, the small plant is still the major locale of employment in this country.[4]

Civilian employment in the United States has recently passed the 62 million mark. Of this number it has been estimated that 48 million work in industry and commerce (i.e., other than in agriculture or self-employment).[4] In few, if any, types of medical practice does the practitioner avoid the impact of our industrial society. In the minimal contact he is at least faced with the problem of certifying to temporary inability to work because of illness or physical disability of his patient. In a more optimal contact he can exert an influence on the character of health programs in industry. In the home community of most physicians there are industrial groups who can benefit by the further application of the art and science of medicine. Society depends on the physician for the answer to medical problems. There is no training which better qualifies a man or woman to find these answers than is that of medicine.

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LIPOID PNEUMONIA

Report of Five Cases

GRACE H. GUIN, M.D.
THEODORE WINSHIP, M.D.

Department of Pathology, Garfield Memorial Hospital, Washington

LIPOID pneumonia is a chronic disease of the lungs resulting from the aspiration of oil into the alveolar spaces. The continued presence of this foreign material in the lungs is followed by altered alveolar epithelium, parenchymal fibrosis, and sometimes death from suffocation. Increasing numbers of cases have been reported since Laughlen[1] first recognized the clinical entity in 1925. His series consisted of 3 children each less than 3 years of age. Two had received alboline nose drops and the third paraffin oil as a laxative. Autopsy revealed in each child what Laughlen described as a mixed type of pneumonia. In addition to the usual acute inflammatory exudate, the alveoli also contained mononuclear cells filled with fat droplets which took a positive stain with Sudan III.

Experimentally, the identical syndrome had been observed by Guieysse-Pellissier[2] in 1920 and by Corper[3] in 1922 following intratracheal instillation of olive oil and liquid petrolatum in rabbits. These workers noted large mononuclear phagocytes containing fat globules filling the alveolar spaces of the lungs of these animals. Pinkerton[4] found that almost any type of oil, whether animal, vegetable or mineral, could cause lipoid pneumonia. Fish oils and milk fat proved to be the most irritating and the substances which provoked the most acute cellular response.

This disease is encountered in patients who give a history of having used oily nose drops or oily laxatives over a long period of time, in children taking fish oil vitamin products, and in debilitated patients with defective deglutition. Because the aspirated oil is always accompanied by bacteria, many patients have recurrent bronchopneumonia. From July 1948 to July 1951 5 patients in whom lipoid pneumonia could be demonstrated came to autopsy at Garfield Memorial Hospital.

Report of Cases

Case 1. H. W. was a 35-year-old white patient of Dr. Edgar Davis. She entered the hospital, September 20, 1948, complaining of fatigue, weight loss and an incapacitating dyspnea of 8 months' duration. She had had a productive cough for 4 months. For 2 weeks prior to admission her temperature had varied daily between 99° and 102°F. She admitted having used approximately 1 ounce of oily nose drops annually for several years.

Physical examination revealed roughened breath sounds with a few basal rales. Gastric washings and sputa examinations were negative for acid-fast organisms. However, the sputum was strongly positive for intracellular fat with Sudan III stain.

Roentgenograms of the chest 2 months prior to admission revealed symmetrical linear densities filling both lung fields. On admission these densities had become confluent and nodular with reduction in lung size. The diaphragm was elevated, fluid was present, and mediastinal adenopathy was apparent. A neoplasm was suspected. The patient died a week following admission.

At autopsy the right and left lungs weighed 950 and 910 Gm., respectively. They were firm, and cut section revealed yellowish-gray tissue with red mottling. Microscopically many of the alveoli were represented only by large, rounded spaces whose walls were greatly thickened and completely replaced by fibrous tissue. Other alveoli were lined with a single layer of loosely attached cuboidal cells. Many of the alveolar spaces contained lipophages. The bronchi were dilated and contained exfoliated epithelial cells and a few multinucleated giant cells. In some areas the bronchial walls were completely destroyed, having been replaced by fibrous connective tissue. Sudan III stains showed groups of lipophages in the alveoli, in the alveolar walls, and in the mediastinal lymph nodes.

Case 2. F. S., a 53-year-old white man, also a patient of Dr. Edgar Davis, was admitted, August 11, 1950, complaining of a pain in the right side of the chest and a nonproductive cough of 3 weeks' duration.

The patient had taken 1 quart of mineral oil a month for many years for relief of constipation.

Physical examination revealed bilateral bronchovesicular breathing at the hilar regions. No rales were heard. Bronchograms and fluoroscopy revealed a lobulated mass in the right lung extending from the sixth to the twelfth rib posteriorly. All visible bronchi were filled. The impression gained from these findings was that the patient had a carcinoma of the right lower lobe. A right pneumonectomy was performed. The patient died a few hours following the completion of the operation. At autopsy the right and left lungs weighed 1,000 and 350 Gm., respectively. The right lower lobe consisted of a rubbery mass measuring 20 by 14 by 12 cm. The surfaces were smooth and gray, and section showed homogeneous gray tissue intermingled with irregular areas of pinkish-gray. Grossly the left lung was normal.

Microscopically the right lung revealed the large mass to be composed chiefly of fibrous tissue and lymphocytes. The few remaining alveoli were lined by cuboidal epithelium and contained giant cells and desquamated epithelial cells. Sudan stains showed lipophages in the alveoli and also in the fibrous alveolar walls. The identical pathological process was present, though to a less degree in the remaining lobes.

Case 3. S. D., a colored woman of 63 years, was admitted to the Surgical Service, November 6, 1950, because of dyspnea. There was a long history of ingestion of an oily laxative. A biopsy was taken from a lesion on the face and a diagnosis of Boeck's sarcoid was made. Physical examination of the chest revealed only bronchovesicular breath sounds in both lung bases. Bronchoscopic examination revealed granular tissue in the right main stem bronchus. Examinations of the sputa were repeatedly positive for intracellular fat and negative for acid-fast organisms.

Roentgenograms of the chest showed linear and nodular densities in the right lung extending from the hilus to the middle and lower lobes with some involvement of the upper lobe. The medial segment of the middle lobe was atelectatic. These findings suggested a diagnosis of lipoid pneumonia or Boeck's sarcoid. A bronchogenic tumor could not be ruled out. Bronchograms showed an obstruction of the right middle lobe bronchus about 1 cm. from its origin. The patient requested discharge and died 2 days later at her home.

At autopsy the right lung weighed 670 Gm. and the left 600 Gm. Over the surfaces were innumerable, firm, irregular, yellowish-gray plaques measuring up to 1.5 cm. Cut section showed the middle lobe to contain nodular masses of fibrous tissue in the hilar regions. Thick zones of fibrous tissue surrounded the bronchi and vessels, and extended well into the lobe. The bronchi were rigid and narrow throughout. The lumen of the right middle lobe bronchus was reduced to 0.2 cm. for a distance of 1 cm. by a thickened wall. The mucosa was hyperemic and granular. The parenchyma of the remaining lobes contained a few firm, yellowish-gray nodules measuring up to 0.2 cm. An infarct 5.0 cm. in diameter found in the right lower lobe was thought to have been the cause of death. The hilar lymph nodes were matted and nodular.

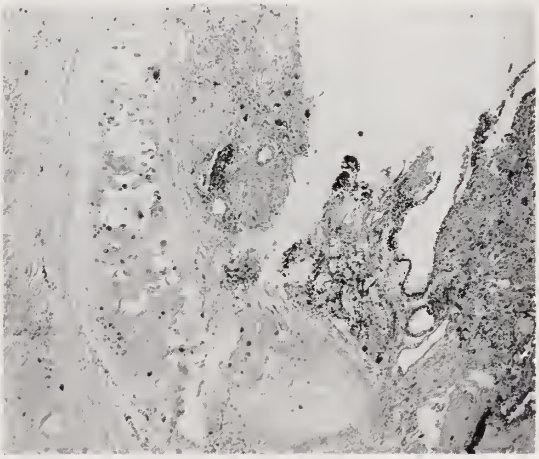

FIG. 1. Case 3. Lipoid pneumonia and Boeck's sarcoid destroying a bronchus.

Microscopic examination of the lungs showed variously sized areas of fibrosis chiefly in the vicinity of the bronchi and bronchioles. These areas resulted from confluent tubercle-like masses containing hyalinized centers surrounded by concentrically arranged fibrous tissue cells. There was a heavy infiltration of lymphoid cells in most areas and scattered Langhans' giant cells. Epithelioid cells surrounded the tubercles, but no necrosis was present. These lesions were located both inside and outside the cartilaginous rings and extended into the lumina (figure 1). This process involved the tissue adjacent to the large vessels but not the vessel walls. Tissue stains were negative for acid-fast organisms. The middle lobe showed interalveolar thickening with infiltration of lymphocytes and phagocytes. Fat stains of all lobes showed droplets of oil. In the upper and lower lobes the oil was free in the bronchi and alveoli, whereas it was contained within the phagocytes and interstitial tissue of the middle lobe. The intracellular oil in the middle lobe beyond the obstructed bronchus represented lipoid pneumonia, while the particles of free oil in the upper and lower lobes represented residual material from the instillation for the bronchograms. Hilar lymph nodes and nodes adjacent to the spleen were crowded with tubercles typical of Boeck's sarcoid. The hilar lymph nodes were positive for intracellular fat when stained with Sudan III.

Case 4. N. M., a 55-year-old housewife, a patient of Dr. A. D. Daughton, had suffered from chronic sinusitis for several years. No history of oil ingestion was obtained but was not specifically asked about. For the preceding 5 years she had noted progressively increasing dyspnea. When seen in January, 1951 the patient had become confined to her bed because of shortness of breath. She stated that a brother had died of idiopathic pulmonary fibrosis. There was no history of tuberculosis.

Physical examination revealed marked dyspnea and intercostal retraction with an acute substernal angle. Breath sounds were distant with a few moist rales throughout. X-ray examination was consistent with a diagnosis of pulmonary fibrosis. The patient's course was essentially afebrile. The dyspnea progressed unremittingly and the patient died, March 17, 1951. At autopsy the right and left lungs weighed 750 and 520 Gm., respectively. Both pleural cavities and the interlobular fissures were obliterated by shaggy, fibrous and fibrinous adhesions, resulting in a thickened pleura throughout. Cut section showed rubbery, dark red and gray tissue traversed by yellowish-gray strands of tissue. The blood vessels were markedly dilated.

On microscopic examination all lobes showed varying degrees of replacement of the parenchyma by fibrosis. The remaining alveoli were well separated by fibrous tissue in which were dispersed large mononuclear cells laden with globules which gave a positive reaction when stained with Sudan III. In addition, foci of lymphocytes were present throughout the stroma. Some of the alveoli were lined with cuboidal epithelium, and the bronchioles were dilated. Bronchopneumonia was noted in the right middle and lower lobes.

Case 5. W. D., an 87-year-old white male patient of Dr. J. R. Jordan, was admitted, June 9, 1951, because of an intertrochanteric fracture of the right femur following a fall 3 days previously. Additional history revealed that he had been using oily nose drops several times a week for the past 3 years. He had also taken mineral oil occasionally for the relief of constipation. There were no complaints referable to the respiratory system. Physical examination of the lung fields revealed coarse rales bilaterally and an enlarged heart. Roentgen examination confirmed the findings of cardiac enlargement and suggested pulmonary edema. The patient died 1 week after admission.

At autopsy the right and left lungs weighed 350 and 290 Gm., respectively. The surfaces were smooth and mottled reddish-gray and black. The tissue was moderately crepitant, and on section the bronchi were seen to be dilated and the surrounding areas dark red and gray.

Bronchopneumonia was seen on microscopic examination. In addition, aggregates of large, fat-positive mononuclear cells were present in the alveoli, and a few lipophages had infiltrated into the interalveolar tissue.

Discussion of Cases

Of the 5 cases described, 4 gave a history of oil ingestion. One had used mineral oil and oily nose drops, 2 had used mineral oil, while 1 had used oil nose drops only. In the absence of a history of oil ingestion in case 4, the possibility of the oil having an endogenous origin cannot be excluded, though endogenous oil in this quantity has not been present in our control cases. The ages ranged from 35 to 87 years. Three of the patients were women and 2 were men.

Symptoms referable to the respiratory tract were present in all but the last case, and in this the lungs showed only minimal involvement. Two patients complained of marked dyspnea which was readily explained by the extensive amount of pulmonary involvement. Two others noted wheezing and cough, and autopsy in each of these patients showed narrowing of a bronchus. Physical examination in this series was of little aid in suggesting the diagnosis. Elevation of the temperature was an inconstant finding. Intracellular fat was detected in the sputa of 2 patients.

X-ray examination of the chest suggested the presence of a tumor in 2 cases. In 1 case the diagnosis was thought to be either Boeck's sarcoid or lipoid pneumonia, and both diseases were present. Pulmonary fibrosis was the diagnosis in 1 case, and no X-ray film was made of the chest in another. The roentgenographic findings in lipoid pneumonia may be quite varied. In the experience of Hampton[5] the findings consist of linear and nodular densities in 1 or more lobes without the thin, sharp lines of fibrosis and usually without reduction in the size of the lobe. Occasionally a dense area of consolidation is seen with ill-defined borders having a spun glass appearance and unchanging over long periods. The lesions are most commonly located inferior to the level of the hilus, and although they may extend to the pleura there is rarely pleural fluid. The most distinguishing characteristics according to Hampton are diffuse multilobar involvement and unchanging appearance over long periods, even years. Confusion may arise by mistaking the lower lobe lesions for bronchiectasis, with which lipoid pneumonia may coëxist, or metastatic lesions. Infarction and tuberculosis must be ruled out.

The degree of pulmonary involvement was not always proportional to the length of time the oil had been used or to the amount of oil used. In this series the interval between the initial ingestion of the oil and the onset of symptoms of lipoid pneumonia was measured in months or years. This observation has been made by others,[6, 7] who have shown that in the adult form lipoid pneumonia is frequently a slowly progressive, insidious disease.

The lungs of a patient dead of lipoid pneumonia are firm and yellowish to gray depending on the amount of oil present. The lesions may be well circumscribed but are more likely to produce a mottled appearance and a firm, noncrepitant consistency. There was a wide range of parenchymal involvement in our group of cases, ranging from minimal alteration detectable only on microscopic examination in 1 case to massive involvement in the other cases. Petrolatum was shown by Pinkerton[4] to evoke a proliferation of fibrous connective tissue cells rather than an acute inflammatory type of cellular response such as follows ingestion of animal oils. If it becomes necessary to identify the oil, it will be found that liquid petrolatum stains well with scarlet red but does not reduce osmic acid, whereas cod liver oil, other animal oils, and all vegetable oils stain with scarlet red and also reduce osmic acid. The histopathologic features of our cases were consistent with the type of oil used. The alveolar walls were thickened by fibrous connective tissue which masked or obliterated most of the alveolar spaces. Many other alveoli were lined by fibrous tissue or showed a cuboidal epithelium lining. Histiocytes in the thickened walls and interalveolar regions were filled with globules which were positive for fat when stained with Sudan III. Bronchopneumonia was an additional finding in 2 cases.

Pathologic–physiologic Features

Medicinals employed orally or intranasally easily gain entrance into the trachea. The amounts of bland oil that enter the trachea are frequently not of sufficient quantity to provoke the cough reflex.[8] Tracheal ingestion is enhanced in debilitated patients, those with defective deglutition, persons in a recumbent position, and infants struggling while being fed. Distribution of the oil in the lobes favors the right lung more frequently than the left, with the lower lobes being involved more frequently than the upper.[7] Once the oil has gained entrance to the alveoli, a histologic chain of events is set up and the steps follow one another in sequence. In most cases all stages of the disease may be identified in 1 lobe. No definite criteria have been established as to what actually constitutes lipoid pneumonia. However, in the absence of clinical symptoms it is thought that the disease exists if certain histologic findings are present. Study of sections from our series has revealed the following histologic changes: Once inside the alveolar spaces the oil becomes emulsified and phagocytes are attracted. In response to the presence of this foreign material the epithelial lining of the alveoli becomes cuboidal, and frequently the cells are shed into the alveolar spaces. In addition, débris, lymphocytes, oil and large fat-filled phagocytes partially fill the alveoli to form conglomerate masses. The origin of the lipophages is still a matter of debate. Mallory[9] thinks that they are derived from the linings of the blood and lymph vessels, but a mesenchymal origin has been suggested by other workers. The lipophages migrate through the alveolar walls into the lymphatic channels, which finally become filled. Phagocytes that are unable to leave by way of the lymphatics remain in the alveoli or the interstitial tissue. A variable lymphocytic response occurs which thickens the alveolar walls. As the fibrous tissue cells proliferate in the alveolar walls, exchange of gases across this barrier becomes increasingly difficult. Blood vessels appear reduced in number in the later stages of the disease. Figure 2 is an example of the end-result of lipoid pneumonia.

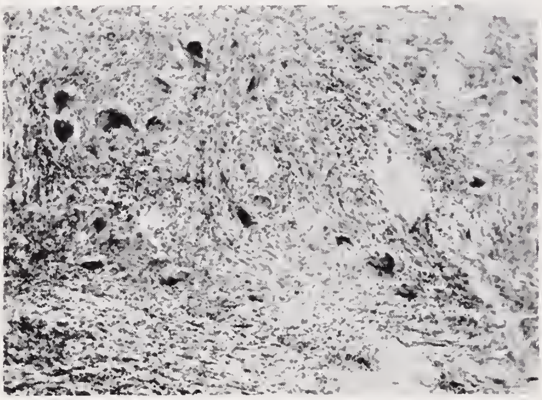
FIG. 2. Case 2. End-result of lipoid pneumonia.

DIFFERENTIAL DIAGNOSIS

Doubtless the most valuable aid in the diagnosis is a strong index of suspicion on the part of the clinician. Even in the absence of a history of oil ingestion, the disease is not necessarily excluded. Conversely, a history of oil ingestion does not necessarily imply that the patient will have lipoid pneumonia. The history must be kept in mind and all findings properly evaluated. Lipoid pneumonia may mimic many other types of pulmonary disease. The lung parenchyma damaged by mineral oil may be the site of recurrent secondary infections, and an unresolving pneumonia may accompany lipoid pneumonia.

The laboratory may offer a diagnostic aid in the form of sputum stained for fat. The technic for collecting the specimen is important. The patient's sputum should be collected in a clean glass container prior to eating breakfast. Smears are made and stained with Sudan III and are positive when the fat appears as minute orange particles within the cytoplasm of the macrophages. Extracellular fat is of no significance.

TREATMENT AND PROGNOSIS

Once inside the lungs, only a fraction of the oil can be removed by physiologic or mechanical factors. The treatment rests solely on prevention. In the light of evidence at hand, the use of mineral oil as a laxative and oil nose drops is to be condemned. The feeding of oily vitamin preparations to a struggling infant is likewise not without danger. If the patient can be persuaded to discontinue the use of oil in these forms, and provided the disease has not reached an advanced stage, life expectancy from the standpoint of lipoid pneumonia is good. However, the added factor of recurring secondary infections may impose a real hazard to life.

It is obvious that all of the factors involved in the etiology of lipoid pneumonia are not yet apparent when the small number of reported cases is weighed against the untold numbers of individuals known to ingest oily medicinal products. Individual susceptibility must play a significant role. There is no way to foretell which patients will develop lipoid pneumonia. There is as yet no way of ascertaining with any degree of accuracy the true incidence of the disease. Like any other pathologic entity, lipoid pneumonia is more frequently found when looked for.

SUMMARY

Five cases of lipoid pneumonia, all of which came to autopsy, have been presented. Physical

(Continued on page 443)

ANXIETY, ITS NATURE AND ORIGINS*
An Introductory Essay to a Series on the Psychoneuroses

HENRY P. LAUGHLIN, M. D.†

Assistant Clinical Professor of Psychiatry, George Washington University School of Medicine

INTRODUCTION

THE student of the fundamentals of modern dynamic psychiatry learns to observe the imperceptible merging of the normal into the borderline, the borderline into the neurotic, the neurotic into the psychotic. He learns that it is no longer convenient or accurate to think in terms of the dichotomy, mind—body, to separate the physical from the emotional, or to separate the emotional from the physiologic. Emotional health is relative. Everyone has problems. These vary in quantity and quality, in the amount of interference with living.

Symptoms are attempted defenses against anxiety. Neurotic symptoms develop from unsuccessful attempts at resolution of anxiety (which, itself, results from conflicts). Anxiety may be expressed directly with outward or subjective manifestations as the major feature of the illness present. On the other hand, anxiety may be expressed by devious and often hidden forms in a variety of psychologic manifestations, phobias, conversions and compulsions, psychophysiologic complaints, and a host of other diagnostic entities.

Anxiety is a relatively new concept in medicine. Despite the universality of subjective experience, only in recent decades has this major source of discomfort begun to receive some of the attention and study which it has most urgently warranted.

As a yardstick for measuring emotional health we increasingly recognize the importance to emotional health of the interaction between people. The vicissitudes of our personal relationships and the satisfactions which we derive or fail to derive are vital.

When can we conclude that a person is emotionally healthy? What is our basis of judgment? The person who has effected satisfactory integration of his internal drives and has harmoniously worked out solutions to them which are acceptable to himself and to his social milieu may be regarded as emotionally healthy. We can also measure emotional health in terms of the level of maturity achieved.

On the other hand, compelling impulses and needs stemming from instinctual drives may remain unsolved, blocked, frustrated or dealt with unsatisfactorily. This state of affairs prevents satisfactory emotional stability and personality adjustment. Neurotic and psychotic patterns of behavior may result. Alexander[1] interestingly describes neurosis as "a failure of the process of domestication."

The study of the ways in which these changes take place is basic to the concept of dynamic psychiatry. We recognize that it becomes scientifically possible by intensive study to work out the whys entering into thoughts, feelings, and behavior. Since much of this is unconscious, the difficulties are great. However, in the properly favorable situation, these may be made more intelligible to the patient and the therapist. The goal of the psychotherapist, therefore, is the gaining of increased understanding or insight for the patient, and indeed for the therapist himself.

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* This paper has been written primarily as an introduction to a series planned to cover the psychoneuroses. The first of this series, entitled "The Anxiety Reactions," is scheduled to appear in the next issue of the MEDICAL ANNALS.

† In the private practice of psychiatry and psychoanalysis, Chevy Chase, Maryland; Consultant in Psychiatry, Walter Reed Army Medical Center and to Office of the Secretary, Department of Health, Education and Welfare; Research Consultant, U. S. Psychological Strategy Board.

In this paper will be considered some important data about the nature of anxiety, its relation to fear and to sleep and something about its possible release through physical activity and its discharge into anger. Then conflict, from which anxiety originates, will be discussed, and the origins of anxiety, with a summary of recent developments and an outline of the origins. Finally, a brief consideration as to whether anxiety is useful will be given.

THE NATURE OF ANXIETY

Anxiety has played a major, although, until recently, unrecognized role in the history of man since the beginning of time. This is true from the standpoint of individual character formation and personality development and, as a result, from the standpoint of the history of nations.[2] Anxiety is a powerful force in the maturing process. Behavior and standards are modified to meet the wishes of significant adults largely through the desire for approval, the absence of which gives rise to anxiety. More will be said about this later.

Anxiety is universal. As an unpleasant phenomenon, as Thompson[3] has pointed out, everyone seeks to avoid it. As a result, mental mechanisms and psychologic defenses are formed which enter into character formation. Sullivan[4] regarded anxiety as a potent force in the formation of the self. Sometimes these defenses are unhealthy. As the process of maturation falters, a neurosis develops. Most psychiatrists are in agreement today that symptom formation in emotional illness is the result of defensive efforts against anxiety.

In view of man's familiarity with anxiety as an unpleasant experience and in view of its presently accepted major role in emotional illness, in personality development, and in health, it is indeed surprising that more attention has not been given to anxiety in past decades. Cohen[5] has called attention to the relatively recent interest in anxiety. Only in the last 30 years has there been much more than fleeting interest. This is even perhaps more surprising from a psychiatric standpoint, since not only does anxiety play a major role in emotional health, but in its absence we would have few patients consult us for treatment. Anxiety is an important factor in seeking treatment. For example, one of the reasons certain patients whose major manifestation is depression never get to treatment is because of the relative absence of anxiety to serve as a motivating force.

One restrictive force was Freud's first theory of the origin of anxiety[6] proposed in his earlier and less experienced years (1894) and essentially unmodified for approximately 30 years. The etiology of anxiety was ascribed by Freud at this time to interference with sexual satisfaction.

Today this would be regarded as naive, and, indeed, there was a crying need for early investigators to develop interest in anxiety, to study it clinically and to realistically test theory against experience. Apparently little was done and perhaps some people felt a lack of freedom or approval in so doing. Unquestionably a genius, Freud nevertheless held on most tenaciously at times to a theory once advanced. Then, too, in the essentially authoritarian atmosphere of the early psychoanalytic movement, with Freud as the central figure, those who offered at all seriously divergent views were no longer welcome.

Other reasons also exist, however. When psychoanalysts were concentrating on early memory recall and on the sexual roots of neurotic processes, they were a small minority of the physicians concerned with emotional illness. Physicians and psychiatrists are themselves by no means immune to anxiety. Since the intuitive or empathic communication of anxiety is a very real matter, could this help explain the failure to earlier study and recognition of the importance of anxiety? Could this have served as an emotional resistance or block to the exploration of areas arousing anxiety?

Anxiety is a normal, i.e., universally experienced, state of discomfort that may be defined in 2 ways.[7] First, from the standpoint of what is experienced by an individual, anxiety is an apprehensive tension or uneasiness. From the standpoint of the term itself anxiety may be defined as fear which is out of proportion to the known stimulus or in the absence of a known cause.

Let us differentiate fear from anxiety. Fear is the emotional response to recognized external danger and is accompanied by physiologic changes. Anxiety is the emotional response to partly or wholly unrecognized internal danger and is often accompanied by physiologic changes. Fear and its accompanying physiologic alterations constitute a reaction designed to meet the external threat. Anxiety is a warning to the ego or self to meet danger which is essentially internal and usually is related to the threat of powerful instinctual demands, the threat of derepression or the threatened loss of approval. As Kardiner[8] said, "Anxiety is under all circumstances a warning of an impending danger." With anxiety, accompanying physiologic changes serve no constructive purpose and instead form the basis for pathologic function (and later of structure) for many emotionally determined (psychosomatic) disorders. Some examples of fear are:

1. A mother has been looking for her child. She is told by a playmate that the child was seen half an hour ago headed down the street toward a major traffic artery. As she nears the avenue there is evidence of some commotion, people have collected, and an ambulance goes by. The mother's pace quickens and she breaks into a run as she overhears a passerby say ". . . someone was hurt; I don't know if it was a collision, or if someone was hit by a car. . . ."

2. An American on a vacation hunting trip to Kenya is suddenly confronted by a lion.

Some examples of anxiety are:

1. A business man who was seen in consultation reported increasing nervousness, insomnia and uneasiness. Holding a position of considerable responsibility in his firm, he reported his principal conscious source of concern to be whether he continued to enjoy the confidence of his boss. He recognized his anxiety as not in keeping with recent spontaneous statements made by his president of his value to the firm, and of his personal respect for the patient and his work. In this instance, unbeknown to the patient, further corroboration existed in the form of similar evaluative comments having been recently made to the examiner who happened to enjoy a personal acquaintance.

2. A stenographer tells her roommate, "Gosh, I'm on edge tonight. I feel worried but don't know what about. My heart is pounding and I'm perspiring more than usual. It's almost like I was waiting for something bad to happen."

3. A 36-year-old married woman reports her fear and panic upon the unexplained absence of her husband for three hours. She is certain that he is dead, has been killed, or has met with a serious accident and waits in dread anticipation of news. At the same time she is aware that this response is out of keeping with the circumstances. His tardiness is not very unusual and there are a number of practical reasons which might explain it. She is, of course, unable to consciously explain her intense reaction.

In example 1 there was some projection, and the boss had been placed in the role of the patient's own critical and doubting father. The student of dynamics will likely think of several formulations which might apply in example 3. Therapeutic investigation uncovered repressed hositility with Oedipal roots and reaction formation as defense.

These examples will help illustrate the close relationship between fear and anxiety. Both are responses to danger. In fear, the danger is external and the response appropriate to the existing cause. The physiologic preparation for "fight" or "flight" is likewise appropriate, although it may be overdone to the extent of interference with, or paralysis of action.

With anxiety the real danger is "internal"[2] and may be partially or entirely out of range of conscious recognition. The emotional response is beyond what might be expected from the facts available. The various physiologic preparations for "fight" or "flight" here are essentially useless, often handicapping and occasionally harmful.

Alexander[9] says, "One type of defense against anxiety is treating the internal danger as if it were an external one, preparing to meet it aggressively."

This treatment of anxiety as an externalized danger reaches an advanced state of development in the formation of a phobia. As Kardiner noted, "By means of projecting the source of danger into the outside world, the subject is able to make a more or less adequate defense thereof; a danger from an instinctive source is thus changed into a danger from an external source."[8]

The actual "fight" or "flight" which can and not infrequently does take place is psychologic and consists of the development of defenses which are symptoms of emotional illness, the use of mental mechanisms, and the development of character defenses (traits).

It is possible that instances may be found in which the major difference between anxiety and fear is largely a matter of the degree of conscious awareness. Let us briefly consider another example in the study of the relationship between fear and anxiety:

A not infrequently encountered problem with people is one of their relationship to authority. A recent case in point was an army corporal who literally became speechless in the presence of commissioned officers (suggested by Captain James B. Woodrum, MSC, USA).

In this instance one can regard the difference between the emotional reaction as one of fear or as one of anxiety, being determined by the difference in the level of conscious awareness. For instance, it may be that his reaction is due to a hostile or aggressive reaction to authority (which may be his own or that of authority, by projection) and which has been pushed out of conscious awareness. (Repression: "The unconscious relegation of material out of [from] awareness. By repression, painful, disturbing, and conflictual thoughts or experiences are assigned to the unconscious."[7])

So long as the reasons remain partly or largely unknown to him, his reaction is one of anxiety. Should the reasons for his feelings come into conscious awareness, the response, to whatever extent it remained appropriate, could be labeled fear.

There is a type of reaction which might best be called apprehensive anticipation, in which the emotions do not accurately or exactly fit into this description of either fear or anxiety, particularly that type of tension experienced while waiting for something (possibly unpleasant or dangerous) to happen. This "something" is not known, but its nature can be guessed at and the possibilities or perhaps potentialities are decidedly unpleasant. Perhaps some examples will illustrate better this emotional feeling:

1. A destroyer was operating in the tropical Pacific in early World War II. A "pip" on the radar screen one moonless night indicated an unidentified object off the port side at a considerable distance and in an area where no U. S. units were operating. The captain reported the find to the task force commander and received orders to investigate immediately at full speed.

As the ship veered off course and picked up knots, the call to General Quarters sounded, and all hands manned their battle stations. The news of the radar contact spread rapidly through the ship. What would be encountered? It could prove to be almost anything, from a harmless derelict or a fishing boat to a major enemy naval unit. What would it be? The tension—or apprehensive anticipation—present in the crew was so marked that it became something almost tangible.

2. The pilot of a B-29 received orders detaching him from the crew, with whom he had worked closely for 18 months, temporarily leaderless. A rigorous mission was scheduled for the squadron when a new pilot reported. What kind of a chap

would he prove to be? What would happen? Was he competent? Could he be relied upon? There would be more apprehensive anticipation during this mission than with previous ones. If things went well and confidence was established, the tension next time would be less.

In these instances the object is external, in keeping with our concept of fear. Although the object is unknown and highly conjectural, in keeping with our concept of anxiety, the feeling is not irrational, nor is it necessarily out of keeping with the amount of actual threat or danger present. Because this response does not exactly fit our definitions of either fear or anxiety, another term, such as apprehensive anticipation might be preferable.

A number of psychiatrists believe there is a fundamental drive or trend toward emotional health. If it were not for this, the cumulative effect of the stresses and strains incident to daily living might leave few people free of serious consequences to their emotional health. The restorative value of sleep is of great importance in such a trend. Sleep is not only important from the standpoint of physical fatigue, but perhaps even more so from the standpoint of mental fatigue from emotional tension and stress.

Thus, sleep plays a most important role in emotional health, and unquestionably vastly increases our tolerance for the many stresses and strains incident to living from day to day. The role of dreams and the possible facilitation of repression are important factors, which are, however, beyond the scope of the present paper. Where personality integration is reasonably sound, the respite afforded by sleep and its restorative value is a major factor in the normal ability to handle a reasonable amount of anxiety and tension.

At times anxiety itself is of such a level as to interfere with sleep. This interference with a natural protective and restorative function can lead to a vicious circle of decreased tolerance, more tension—less sleep, etc. There is evidence of widespread recognition of this role of sleep, often on an empiric basis. As an example, the director of personnel of a large organization was recently discussing criteria for handling of executives who react unfavorably to stress. The policy has been developed over a period of years, largely empirically, to arrange relief or transfer for an executive in any instance in which his ability to sleep becomes impaired.

Sedatives can play a useful role in acute situations in artifically inducing the conditions of sleep. Their temporary value and service as a "crutch" must, of course, be kept in mind. As an illustration, it has been found that heavy sedation to surviving airmen following a crash is highly beneficial.

The importance of sleep is perhaps no more clearly demonstrated than when there is substantial (30 to 100 hours or more) deprivation. There is universal development of various degrees of abnormal psychologic manifestations, merging at the more serious level into psychotic-like states, with prompt recovery after 8 to 14 hours of sleep. These phenomena have been summarized in another paper.[10]

It becomes clear that sleep has an important relationship to human ability to tolerate anxiety and stress. When this restorative function is interfered with by the very forces against which it helps to protect, this can serve as a useful indication that emotional health is threatened. Briefly noted might be the reverse response to anxiety from insomnia. Sleeping is occasionally seen as a response to anxiety which may be voluntary or involuntary. It can be developed as a faculty and may or may not be pathologic.

In the example of the destroyer, the radar contact turned out to be a surfaced enemy submarine. The crew exploded into activity. As all guns began firing (including even AA guns when no orders to fire had been received), there was tremendous relief secured from tension in activity. This phenomenon is widespread. When physical activity is possible, a large measure of relief from anxiety can result.

The explanation lies in the physiologic preparations for "fight" or "flight" which accompany anxiety. The energy potential present finds expression and release in physical activity. In this instance, there is also the opportunity for direct aggressive action. This explanation is also valid for the dissipation of "nervous tension" sometimes possible with physical work.*

Anxiety sometimes finds expression in anger. A tense and anxious person is much more likely to be angry. Here the anxiety is also translated into a kind of activity. The explanation is similar to the foregoing. The accumulated energy potential (preparation for fight or flight) "welcomes" a chance for expression and release.

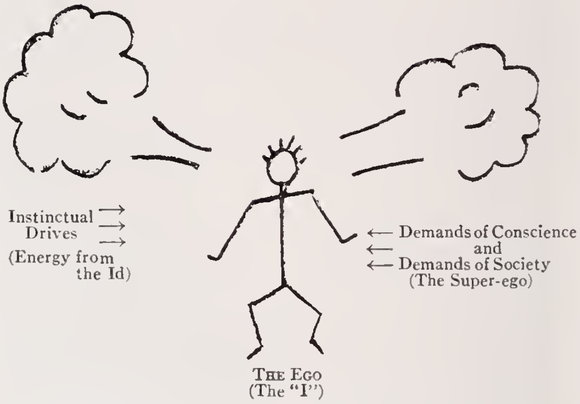
Conflict

Since the harvest of conflict is anxiety, attention will be focused here. Conflict is a basic part of human experience. With the development of individual and social standards in the presence of basically instinctual drives, conflict is inevitable.

A conflict may be simply defined as the clashing of two opposing interests. Conflict takes place between the instinctual drives (id) of the personality and the demands of conscience or society (super-ego). The realization of instinctual goals is interfered with by opposing standards of personal and social demands.

One may regard the goal of mankind as the attainment of a state of emotional satisfaction or peace of mind.[11] Since conflict results in anxiety, we continually attempt to handle this discomfort. Our ways of attempting this may be constructive, socially useful, and effective. They may be also destructive and harmful both to the person and/or to society. Since we make great efforts to free ourselves from anxiety, we may see (from a study of the "mental mechanisms") that the result is often obtained by a highly circuitous route. The methods by which we seek to attain the theoretical goal of peace of mind are indeed diverse and often devious. The degree of success is likewise quite variable.

THE CONFLICT


Instinctual Drives (Energy from the Id)
→
→
→
← Demands of Conscience
and
← Demands of Society (The Super-ego)
THE EGO (The "I")

Conflict takes place where the Ego, the "I", becomes the battleground (and suffers the discomforts!!)

As noted, the customs and restrictions of society constantly block or frustrate the fulfillment of instinctual drives. Situations producing conflict involve all kinds of basic and important matters. These include, for example, matters related to school, family, religion, and occupation. Actually, conflict enters into many areas of fine delineation.

In other words, when we think of conflict we regard it as the clash which takes place between our moral, social and personal standards on the one hand, and our egocentric and instinctual strivings (self-preservation, acquisitive, aggressive and destructive drives, the desire for possession, anger, love and sex) on the other.

These instinctual or id drives are inherent to the infant. Although the drives are present in strong force and with little opposition—the conscience remains to be developed in the infant, there is a markedly limited capacity to achieve them. Needless to say, this is socially fortunate. As the capacity of the child to achieve basic instinctual needs increases, so does his learning of the importance of control, modification and sublimation. The child's success in learning these things and our ability to help him learn is the most important area of childhood development. The relative success of this whole process is indicated in his ability to achieve a higher and more adult level of adjustment. This is also, in essence, the fundamental responsibility of parenthood—to facilitate this process of acculturation.

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* At this point I should like to acknowledge comments and suggestions from A. N. Christmas, Daniel Blain, George C. Darr, Robert T. Morse, Mottram Torre, and the coöperation of Yawl A. Corisande.

Not all conflicts prove indissoluble, nor is every conflict necessarily a source of difficulty. In the development of the normal individual, many conflicts are dealt with successfully. It is the ones that result in further problems in which we are interested. These are the ones that are followed by emotional disturbances of all kinds.

The presence of conflict produces anxiety. Although it is true that repression may occur so quickly that anxiety scarcely enters into consciousness, it is nevertheless true that anxiety is a universal accompaniment of conflict.

As already noted, the automatic aim of the individual is to escape discomfort. Since anxiety is indeed uncomfortable, the individual undertakes ways of dealing with the conflict. It is not within the scope of this paper to cover the many complex psychologic mechanisms (the so-called dynamisms or mental mechanisms) which are employed. In a broad sense, however, the response to conflict and from the resulting anxiety can be classified under the "fight" or "flight" responses by which one meets fear.*

In summary, we see that from serious conflict situations anxiety and tension arise which tend to destroy the harmonious equilibrium of the personality. Anxiety is an apprehensive tension which arises directly from conflict (primary, direct anxiety) and indirectly from unconscious sources (secondary, indirect anxiety). Anxiety and tension may be regarded as universal and extensive. Actual awareness, however, is relative. One may also be totally unaware of the underlying cause. This is particularly true of secondary anxiety where its roots are in the unconscious and in unconscious processes. The presence of conflict and resulting tension is the central concept in the origin of neurotic and functional, psychotic, emotional illnesses.

Actually, the mental mechanisms* represent attempts to reach solutions to serious conflict situations. They may be regarded as defenses against anxiety. They may represent compromise. The use of mental mechanisms in the solution of conflict to some degree or other is universal. Their use, however, may be in general regarded as less successful in attaining the goal of peace of mind than is a real constructive solution to the conflict. Solution by constructive compromise may modify or influence behavior. It is possible for opposing drives of equal strength to result in paralysis of action, for example, the mute catatonic.

There is a great complexity of emotional processes.[11] Since much of what happens in our attempt to deal with conflict takes place on an unconscious level, we recognize increasingly the many problems and difficulties in psychotherapy. Since the psychotherapy which has increase of insight or self-understanding as its goal aims at derepression, that is, the uncovering of unconscious material and the study and understanding of it, the importance of the actual work done by patients in psychotherapy becomes apparent. The work required of the patient himself in the therapeutic procedure makes the process of psychotherapy a different one from that of most other treatment measures in medicine.

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* As a reaction to anxiety the ego may actually take a variety of pathways in attempting to deal with the conflict. In one classification[11] these include modification (e.g., rationalization, modification of demands or resignation, regression), abandonment (of original goal and sublimation), and avoidance (leading to repression and other mental mechanisms). In turn, as a response, often to the incomplete working of the mechanisms, to partially incomplete repression, or to threatened derepression, secondary anxiety is produced. This type of anxiety is disruptive and can result in producing a vicious circle.

* A list of the more commonly described mental mechanisms includes:

1. Compensation
2. Denial
3. Displacement
4. Fantasy
5. Idealization
6. Identification
7. Incorporation
8. Internalization
9. Introjection
10. Projection
11. Rationalization
12. Reaction formation
13. Sublimation
14. Substitution
15. Symbolization

Brief definitions of these may be found alphabetically.[7] A discussion of them is included in most standard psychiatric texts (e.g., chs. 5 and 6, pp. 74–92[11]).

For example, a highly successful businessman was addicted to the periodic overuse of alcohol and to resulting periods of almost unrestrained destructive behavior. On the urgent request of his internist he was seen for consultation after he had been hospitalized.

Effecting a show of outward coöperation, he stated his determination to answer whatever questions the consultant might raise. In effect, however, he challenged the psychiatrist to secure data and was unwilling to assume any responsibility for discovering what entered into his behavior and difficulties. His primary concern appeared to be an effort to obtain from the psychiatrist what he described as a "favorable report" and an early release from the hospital. He did not wish to probe deeper into his emotional self.

This man possessed unusual skill and business ability by which he had earned for himself outstanding financial success in his chosen field of business. But he could not be brought to see the value of self-observation and study, for, and of himself. As a result, his irresponsibilities and episodes of antisocial behavior continued until his recent death. Not only did he jeopardize his past successes, but he seriously damaged his future.

This man attempted solution of his difficulties through escape and avoidance, which was somewhat "successful" in early years, but which gradually lost effectiveness as events progressed and he became more desperate. To his death, however, self-appraisal and self-study were to him more of a threat than the very painful consequences of his behavior.

THE ORIGINS OF ANXIETY

Thus a working definition of anxiety has been presented. The relationship to fear has been discussed, as has been the concept of emotional health. The importance of emotional conflict has been summarized, and reference made to the ways by which we attempt to handle the anxiety resulting from conflict. In this final section the main effort will be to present an outline formulation as to the sources of anxiety.

In 1923 Freud presented his "second" theory of anxiety which is much closer to current concepts. The essential point was that neurotic symptoms developed in the attempt to cope with anxiety.[3] This was a far cry from the earlier primitive theory placing anxiety as a physiologic response to orgastic frustration and undoubtedly encouraged further research.[6]

Alexander[1] relates anxiety to the repression of hostile impulses, which he considers to be at the core of every neurosis. He believes that early aggressive impulses must be controlled by repression. Presumably the threat of derepression arouses anxiety. Lorand[12] regards the nucleus of anxiety as being in the Oedipus problem and its vicissitudes. He states further that "all the symptoms are connected with repressed sexual drives and they represent a compromise between the repressed erotic wishes and the repressive forces."

Rank believed the prototype of anxiety was in the birth experience.[3] Few have accepted his theories, which he partially based upon the physiologic manifestations accompanying birth and which seemed to him to approximate those (circulatory, respiratory, etc.) present with anxiety. As a result, however, he stressed the importance of separation and the threat of separation as a basis for anxiety.

Sullivan[4] equated anxiety directly with disapproval from a significant adult, while Fromm is impressed with the importance of the conflict between the need for approval (closeness; love) and the need for independence.[3] He also regards repressed hostility as a frequent source of anxiety.

Thus, various leaders in the field of psychiatry have offered ideas which have contributed to our growing knowledge about anxiety. While some investigators have been impressed with the relative importance of a specific given etiologic mechanism, most people now agree as to the tremendously important role of anxiety in our individual development and in living. Let us proceed to a classification of the major sources of anxiety as we have found them convenient to study. For convenience, these will be divided into the primary or early sources of anxiety and the secondary, or later sources.*

A. Early (Primary) Sources of Anxiety

Following are the major sources of anxiety as they originate in the infant. For convenience they will be considered in 6 categories, as follows:

1. Helplessness

The basic helplessness and dependence of the infant is believed to give rise to much of what we may regard as primitive anxiety. The infant is, of course, completely dependent on the care provided by his parents, especially the mother. In the beginning, completely helpless, the infant's development of resources to cope with the outside world is a long, difficult and gradual process. Much of what transpires during this period is related to the later attitudes and the inner resources of the adult, especially when coping with difficulties.

On occasions in adult life when one is confronted with a situation in which he is again helpless, this primitive kind of anxiety from this very early period may be, in effect, reactivated. Helplessness then is an early or primary source of anxiety in the infant and is likewise a source of deep-seated anxiety in the adult. Appropriately enough, Wordsworth knew this when he said, "The child is father of the man."

2. Separation Anxiety

This source of anxiety is closely related to the foregoing helplessness. In view of the complete dependence of the infant for all his needs and his very life upon the mothering one, it is obvious that the threat of separation is a source of fear and anxiety. In normal personality development, security develops as dependency decreases. Separation no longer results in anxiety.

Where this process is faulty, separation or the threat of separation may continue in later life to be a major hidden source of anxiety. In the adult, separation or the threat of separation may have unconscious roots back to the early period and be very disturbing. The connection in these instances is out of awareness. Vulnerability to emotional upset from separation may increase when the individual is already emotionally disturbed by existing conflicts.

3. Empathic and Intuitive Communication of Anxiety

The infant possesses a keen ability to intuitively sense the presence of various emotions, including anxiety, indifference, resentment, and hatred in the mother, or mothering figure. The presence of anxiety is communicated from mother to child automatically and rapidly, and one can observe quick responses of the infant to changes in mood by the parent. The intuitive communication of anxiety and other emotions to the infant takes place from other significant adults, as well as from the mother.

Through his ability to sense mood changes, uneasiness, apprehension, or anxiety, the infant has thus another primary pathway for the development of anxiety. This is an important source, an empathic source of infantile and childhood anxiety; and in many instances also carries over in unobtrusive ways into adult life. This carry-over of empathic production of anxiety will depend upon the relative amount of this phenomenon (amount of stress and trauma initiating it) in early life and the strength of resulting patterns of reaction and behavior established.

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* Revised from reference 11. Acknowledgment is made to Lt. Colonel David P. Lauer, MC, USA, whose useful comments have contributed to this revision.

4. Approval-Disapproval

Another important early source of anxiety is that produced in the infant in response to attitudes of disapproval by the significant adult. The infant soon learns the value of pleasing and of securing approval, as well as the consequences of displeasing.* The importance of this in the formation of character structure and personality is indeed great, particularly in super-ego development.

5. Frustration

Here is included the sequence of frustration, anger, hostile (aggressive) impulses, and anxiety. The anxiety is present with threatened loss of control or with the threat of retaliation. Actually there is a close relationship to what happens as discussed in the preceding paragraph about approval-disapproval as well as to the following.

6. Physical Threats

Many psychiatrists share the view that anxiety related to physical threats is ultimately "castration anxiety" after Freud.† It would seem more appropriate to consider this area in a somewhat different context. Accordingly, three categories are as follows:

a. Environmental threats include such physical discomforts as temperature, position, and general comfort and actual physical pain.

b. Internal threats include anxiety with deprivation in such physiologic phenomena as hunger, thirst, other physiologic needs, and the consequences of illness.

c. Physical abuse and punishment overlap with previously outlined sources of anxiety, but include anxiety associated with the threat of, or actual physical punishment. (This area would fit in most closely with the sexual and oedipal factors implicit to the concept of castration anxiety.)

It is worthy to point out, before continuing with a listing of secondary sources of anxiety, the complete helplessness of the infant and his complete dependence upon parental figures for satisfaction of his needs and, basically, for his very existence. As evidence of this in "6" (Physical Threats), the infant can himself do little about "a"; amelioration of "b" is up to parents, and "c" is a reflection of parents' love, understanding and real acceptance.

B. Secondary (later) Sources of Anxiety

The later or secondary sources of anxiety are of course determined in large measure by the earlier ways in which anxiety develops. Not only is there a close relationship in the ways, but the earlier sources tend to serve as prototypes for anxiety in adulthood and appear to create what might be considered as patterns of response. In the earlier part of this paper we saw ways in which some of the following sources of anxiety operated.

1. Super-ego Conflict (conflicts with conscience)

As the conscience or super-ego develops, conflict becomes possible between instinctual needs on the one hand, and super-ego restrictions and inhibitions on the other. Anxiety now becomes possible in a strictly personal, internalized sense.

Super-ego, i.e., the conscience, develops largely in response to real or assumed attitudes of significant people in early life. By the acceptance (and internalization) and by the rejection (sometimes with the "reaction of the opposite"—reaction formation) of their standards and attitudes, the conscience gradually takes form. As it develops, the conscience largely assumes the function of approval-disapproval previously exerted by important external figures. There is now an internal censor.

To the extent that this is successful, the importance of approval from outside sources decreases. In other words, the function of approval-disapproval originally coming from important adult figures in early life is now taken over by (an "internalized" authority) the conscience.[11]

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* Where strong instinctual needs result in unwelcome behavior, the child is threatened with (1) loss of love of parents (Sullivan stressed the importance of need for approval), (2) punishment (physical harm), and (3) social rejection. (Response to parental disapproval gradually broadens to include other significant relationships and finally society as a whole.)

† Schilder[13] succinctly stated Freud's unequivocal view in considering "anxiety as a danger signal which warns the ego of an inward or outward danger. This danger is, directly or indirectly, castration."

2. Approval-Disapproval

Although, as we have just seen, the conscience takes over the role of censor, this does not eliminate the very human need to please, to seek approval. Some of this continues and may remain a major source of anxiety, particularly in certain instances in which the maturity is faulty (i.e., in some cases of neuroses).

3. Social Conflict

Anxiety arises when conflict exists between powerful instinctual drives and social standards.

4. Situational Anxiety

This is the anxiety which results from environmental threats. Anxiety here is close to fear, in that it at least appears to arise in response to external sources. Included here are threats of physical or psychologic injury. However, since an undue response to a danger depends on internal personality factors which are usually hidden, internal sources may make a substantial contribution even when the stimulus is in itself of catastrophic level.

5. Miscellaneous

Here are included the carry-over of infantile responses of anxiety to (a) separation, (b) empathic or intuitive communication, and (c) helplessness—dependency. Some pattern formation and continuity of response is undoubtably a normal finding in every person. Such residuals in isolated fashion are not necessarily neurotic. They are regarded as clearly neurotic when discernible interference with effectiveness in living results.

Also to be included is anxiety resulting from frustration or interference with a personal goal. Anxiety may accompany anticipation of an unwelcome change in ways of deriving satisfaction.

Opinions differ as to the function of anxiety. Where anxiety interferes with effectiveness or satisfaction, it is clearly harmful. In many instances of emotional illness anxiety is a principal manifestation. Sullivan[4] pointed out the restrictive effects of anxiety, interfering with much mental and emotional activity.

From this standpoint anxiety is viewed as a disruptive force which can be regarded only as injurious, disorganizing and harmful. It is a pathologic phenomenon and is to be viewed unfavorably in relation to emotional health and well-being.[11]

Anxiety, however, is an important force in character formation and personality development. From this standpoint, anxiety can be viewed in a broad sense as exerting a constructive influence (within certain limits) in counteracting apathy and in halting any tendency toward the stagnation of self-satisfaction.

According to this view, anxiety may be considered sometimes as a constructive force tending to advance individual personal adjustment and socialization. The uneasiness and apprehension (anxiety) aroused by the disapproval of parents, the "significant adults," are emotions which tend to bring about constructive change in the infant. Thus, to a point, anxiety may be a socializing influence, a promoter of acculturation. In excess, however, it becomes disjunctive, pathologic, the core of neurotic and the nonorganic psychotic illnesses.[11]

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THE COAGULATION MECHANISM AND TESTS FOR STUDYING THE HEMORRHAGIC DIATHESES*

JACK J. RHEINGOLD, M. D.

Associate in Medicine, George Washington University School of Medicine

COAGULATION is a process which is important in many branches of medicine today. Increased coagulability means possible thromboses, and the reverse renders a patient liable to hemorrhage. Coagulation must be thought of as a constant balance between forces favoring it and those opposed, so that blood flows normally without clotting through the blood vessels and yet when it is needed, it must be prompt and efficient. Although vascular factors play an important role in blood clotting, the present discussion will be limited to the coagulation mechanism itself.

The various schemata currently being advanced to explain current knowledge seem to be on the surface as complicated as Morawitz' original 2-stage theory was simple. Despite the discrepancies which characterize intense activity going on simultaneously in different laboratories, some order has emerged. It is possible to formulate a working hypothesis of a practical nature if one is not disturbed by the various synonyms of the clotting factors nor confused by the differences of opinion among the experts in regard to lesser details of the mechanism.

It may be considered that coagulation begins with the disintegration of platelets and is concerned with, first, the formation of thromboplastin, next, the conversion of prothrombin to thrombin, and, finally, the formation of fibrin from fibrinogin. This 3-step process occurs as follows:

1. Platelets disintegrate and liberate a substance (probably an enzyme) which converts prothromboplastin (a plasma thromboplastic factor, a precursor of thromboplastin and probably the deficient factor in hemophilia) to thromboplastin.

2. Prothrombin plus thromboplastin plus calcium yields small amounts of thrombin. This small quantity of thrombin converts 2 precursor substances present in plasma into active accelerator factors. These are then responsible for speeding up stage 2, so that adequate quantities of thrombin are rapidly formed. This may be depicted as follows:

$$\text{Prothrombin} + \text{thromboplastin} + \text{Ca} \longrightarrow \text{small amounts of thrombin}$$

$$\text{Pro-accelerin} \xrightarrow{\text{thrombin}} \text{accelerin}$$

$$\text{Pro-convertin} \xrightarrow{\text{thrombin}} \text{convertin}$$

$$\text{Prothrombin} + \text{thromboplastin} + \text{Ca} + \text{convertin} + \text{accelerin} \longrightarrow \text{thrombin}$$

(Both of these accelerator factors have many synonyms. Their names are unimportant and could be called accelerator A and B, but table 1 groups these synonyms for clarification, if desired.)

TABLE 1

Pro-accelerin → Accelerin

Synonyms

Factor V → Factor VI
Labile factor
Prothrombin accelerator
Plasma accelerator globulin → serum accelerator globulin, etc.

Pro-convertin → Convertin

Synonyms

SPCA precursor → SPCA (specific prothrombin conversion accelerator)
Factor VII
Prothrombin conversion factor

3. Fibrinogen plus thrombin yields fibrin.

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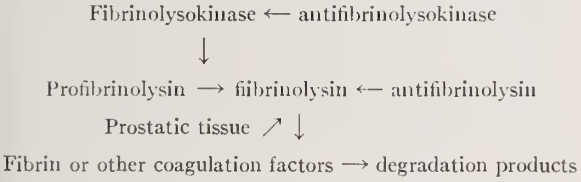
* Presented in a postgraduate lecture course for physicians on the Practical Application of the Basic Sciences in Internal Medicine at George Washington University School of Medicine, December 18, 1952.

Among the new factors now being evaluated are several additional ones supplied by platelets which respectively are concerned with acceleration of stages 2 and 3, and a plasma thromboplastic component (PTC) which seems to be concerned in stage 1 with the activation of thromboplastin.

So far the factors favoring coagulation have been discussed. Less is known concerning the substances which oppose it in the constant balance which exists. Two physiologic anticoagulants are mentioned, namely antithromboplastin and antithrombin. It is likely that there is an "anti" factor for each of the "pro" substances. There is some unanimity of opinion that fibrin itself acts in this regard by absorbing thrombin on its surface and thus interfering with its continuing action.

Although the part that the fibrinolysis mechanism plays normally in dissolution of a clot is uncertain, disorders associated with an overactivity of this enzyme are being more widely recognized, particularly in obstetrical and postoperative conditions. The fibrinolytic mechanism has been depicted by Stefanini[1] as follows:


Fibrinolysokinase ← antifibrinolysokinase
Profibrinolysin → fibrinolysin ← antifibrinolysin
Prostatic tissue
Fibrin or other coagulation factors → degradation products

Profibrinolysin is activated by an enzyme, fibrinolysokinase, to the active fibrinolysin which then lyses the clot.

The tests for the study of a bleeding problem may be grouped in accordance with each of the 3 stages of the coagulation mechanism. (The tests for vascular function such as the tourniquet test, suction, histamine and snake venom tests are likewise done but will not be further discussed here.)

I. Formation of thromboplastin:
    a. Since platelet substance is necessary to react with thromboplastinogen, platelet evaluation is determined as follows:
        1. Platelet count
        2. Appearance of platelets on differential smear
        3. Clot retraction
        4. Bleeding time
        5. Prothrombin consumption time. (Abnormal indicating reduced conversion of prothrombin in the clotting process.)
        6. Tourniquet test
        7. Plasma recalcification test. (In severe thrombocytopenia this test will be abnormal.)
    b. The plasma recalcification time and the prothrombin consumption time will also be abnormal if thromboplastinogen is deficient, as in hemophilia.
II. Formation of thrombin:
    a. Prothrombin time
    b. Prothrombin consumption time. (This test may be abnormal if the accelerator substances are deficient.)
    c. Specialized technics for determination of concentration of the accelerator substances.
III. Formation of fibrin:
    a. Screening test (addition of thrombin to test plasma).
    b. Plasma fibrinogen level
IV. Presence of anticoagulants:
    a. Plasma recalcification time with mixture of normal blood.
    b. Specific tests for an anticoagulant may be done. (If plasma from the patient prolongs the coagulation time of normal blood and anticoagulant is present)
V. Test for fibrinolysin.

Most of the above tests (except for certain specialized technics, such as for the concentration of accelerin or convertin and the specific

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DIAGNOSIS AND TREATMENT OF HEMORRHAGIC DISORDERS*

PEARL B. HOLLY, M. D.

Assistant Clinical Professor of Medicine, George Washington University School of Medicine

A PHYSICIAN, confronted with a bleeding diathesis, is anxious to establish the etiology and/or pathologic physiologic alterations in order that he may treat the patient intelligently. Although the history and clinical findings are of great importance, the final diagnosis of a hemorrhagic disease must be confirmed by available laboratory tests properly performed and interpreted.

When a local area is traumatized, blood escapes into the surrounding tissues. The injured blood vessels constrict and retract, closing their lumina, as the platelets aggregate and initiate clot formation with the aid of fibrin (end-product of blood coagulation). The platelets also contribute a vasoconstricting factor,[1] which Quick[2] now believes is of prime importance in hemostasis. Later the blood vessel walls relax, leaving the clot and the tamponade produced by the engorged surrounding tissues as the hemostatic mechanism. Still later, the extravasated blood begins to undergo absorption, leaving the blood clot as the sole source of hemostasis. If the vascular bed is deficient (i.e., poor vasoconstriction), clot formation alone may not stop the oozing and the bleeding time will be abnormally prolonged. If the vascular bed and tissue turgor are normal but a soft, friable deficient clot forms, the bleeding time will be normal; but an hour or hours later (when the blood vessel walls have relaxed), the wound may resume bleeding (i.e., in hemophilia).

Normal hemostasis depends on the integrity of 3 complex factors, the vascular bed, the platelets and the blood coagulation system. These mechanisms function together to curtail pathologic blood loss. In hemorrhagic disorders 1, 2 or 3 of these factors may be abnormal, depending on the severity of the underlying process. For example, it was generally accepted until recent years, that the signs and symptoms, of idiopathic thrombocytopenic purpura (I.T.P.) were due to the low platelet count and excessive fragility of the capillary walls, whereas the coagulation mechanism remained unimpaired (as manifested by a normal test-tube coagulation time). With the advent of more refined coagulation study technics we now find that clot formation is not normal, as one would expect if we accept the role of the platelets in the elaboration of thromboplastin. Conversely, in severe hemophilia one may occasionally find impaired vascular tone and a prolonged bleeding time in addition to the coagulation dysfunction.

At present, from the clinical and laboratory data,[3] the hemorrhagic disorders may be divided into the following groups: (1) those due to vascular dysfunction, (2) those due to platelet deficiency, and (3) those due to dysfunction in the coagulation system.

Vascular Dysfunction with Normal Platelets and Normal Coagulation System

Hereditary telangiectasia, senile purpura, allergic, toxic and simple purpura, scurvy, and pseudohemophilia are the representative diseases in this group. The diagnosis depends on the history (i.e., familial in hereditary telangiectasia, exposure to a toxic agent in toxic purpuras, deficient ascorbic acid intake in scurvy, and a congenital or familial bleeding history in pseudohemophilia). Physical findings referable to the presenting vascular lesion, and adequate normal platelets and a normal coagulation mechanism as shown by laboratory tests complete the diagnostic picture.

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* Presented as a postgraduate lecture in a course for physicians on the Practical Application of the Basic Sciences in Internal Medicine at George Washington University School of Medicine, December 11, 1952.

The capillary fragility and the bleeding time tests are variable. In hereditary telangiectasia these tests are normal and the diagnosis depends upon the disclosure of the telangiectasia. This condition should be considered in patients with chronic blood loss of unknown etiology. In the nonthrombocytopenic purpuras (allergic, toxic, simple or senile) these tests may or may not be abnormal. In scurvy the capillary fragility test is markedly positive while the bleeding time is normal. In pseudophemophilia the bleeding time is prolonged. A prolonged bleeding time with normal capillary fragility may also be encountered in some cases of idopathic thrombocytopenic purpura after splenectomy. How splenectomy improves the vascular permeability while the platelets remain subnormal in these patients remains to be elucidated.

Cauterization and obliteration of the offending telangiectasia in hereditary telangiectasia is specific where accessible. Supportive transfusions may also be necessary in severe blood loss. The allergic, toxic and simple purpuras are usually self-limiting; cortisone adminstration in severe cases may be tried for a period of 10 days. Ascorbic acid produces dramatic results within 3 to 5 days in scurvy. Supportive transfusions are administered to patients with pseudohemophilia.

Thrombocytopenia

Diseases associated with reduction of blood platelets are:

1. Idiopathic thrombocytopenic purpura
2. Secondary thrombocytopenia associated with
    - a. Hodgkin's disease, Boeck's sarcoid, tuberculosis, acute disseminated lupus erythematosis, etc.
    - b. Drug sensitivity to quinidine, sedormid, sulfonamides, butazolidin, benzol, acetyl salicylic acid, etc.
    - c. Aplastic anemia, acute and subacute leukemia, post-irradiation effect, hemolytic anemia
    - d. Pernicious anemia, nutritional deficiencies
3. Thrombotic thrombocytopenia with hemolytic anemia
4. Thrombasthenia.

When the platelet count falls below 50,000, the platelet enzyme is reduced, resulting in a decrease in thromboplastin, an increase in plasma recalcification time, and an increase in serum prothrombin activity, indicating inadequate utilization of prothrombin. The whole blood coagulation time and plasma prothrombin activity (Quick's test) are normal. The platelet vasoconstricting factor is also decreased, resulting in a markedly positive capillary fragility test and a prolonged bleeding time. Since platelets play an important role in syneresis, little or no clot retraction is found within 24 to 48 hours in severe thrombocytopenia.

A simple test for the evaluation of thrombocytopenia is the perusal of a routine blood smear. Normally one sees 1 to 5 platelets with an occasional clump in every oil immersion field. When the platelet count is approximately 50,000 or below, a rare, large, individual platelet is found in every fifth or tenth oil immersion field. This finding, and the absence of clot retraction, is sufficient for the diagnosis of thrombocytopenia, and these tests should always be performed to check the platelet count.

In children and young adults idiopathic thrombocytopenic purpura tends to occur following an upper respiratory infection or after one of the acute infectious diseases of childhood. These patients are treated medically (a trial of cortisone therapy for 10 to 14 days; platelet transfusions as necessary) and observed for many months, since many completely recover during this period. When a severe acute case or a chronic case of this disease is not responding to supportive therapy, splenectomy may produce marked amelioration or cure of the thrombocytopenic process.

In the secondary thrombocytopenias, removal of the offending agent or disease, when possible, may effect a cure. If thrombocytopenia persists and is clinically troublesome, splenectomy is indicated, after a trial of cortisone therapy.

Thrombotic thrombocytopenia and thrombasthenia have not benefited from splenectomy or hormonal therapy.

DEFECT IN THE BLOOD COAGULATION SYSTEM WITH NORMAL PLATELETS AND NORMAL VASCULAR FUNCTION

The diseases are:

1. Hemophilia: defect in thromboplastinogen
2. Hypoprothrombinemia: reduction in prothrombin
    a. Congenital or acquired (vitamin K deficiency due to faulty absorption or inability of the liver to manufacture prothrombin)
    b. Dicumarol administration interferes with the synthesis of prothrombin
3. (a) Parahemophilia[4, 5]: a defect in serum AC globulin (factor VI or labile factor or proaccelerin)
    (b) Congenital SPCA deficiency[6] (serum prothrombin conversion accelerator or proconvertin or factor VII)
4. Fibrinogenopenia: reduction or destruction of fibrinogen
    a. Congenital
    b. Acquired: in severe liver disease or in the presence of active fibrinolysin (shock, at time of delivery)
5. Circulating active anticoagulants
    a. Antithromboplastin; other anticoagulants, seen in a very occasional patient with hemophilia after repeated transfusions, or rarely postpartum
    b. Heparin interferes with thrombin activity and acts as an antithrombin.

In this group, the coagulation of whole blood and recalcified plasma is abnormally prolonged. The utilization of prothrombin is poor.

In the performance of Quick's prothrombin concentration test (plasma prothrombin activity), rabbit brain thromboplastin and calcium are added to the patient's plasma. This test depends on the presence of prothrombin, AC globulin (proaccelerin), SPCA (Proconvertin), and fibrinogen. Since significant reductions in AC globulin and fibrinogen occur rarely, the Quick prothrombin test measures prothrombin activity essentially. The more complicated two-stage prothrombin method of Brinkhaus and Warner measures the actual amount of prothrombin present. The Quick prothrombin test is normal in hemophilia, markedly decreased in hypoprothrombinemia (i.e., with dicumarol therapy), parahemophilia (AC globulin is significantly reduced) and congenital SPCA deficiency; no clotting endpoint occurs in fibrinogenopenia.

The prothrombin consumption test (serum prothrombin activity) measures the difference in prothrombin activity between plasma and serum 1 to 4 hours after the clot has formed. Normally, less than 20 per cent of the original prothrombin activity is present in the serum. Abnormally, 50 to 90 per cent of the original prothrombin activity is still present in the serum, indicating a defect in the utilization of prothrombin. In the performance of this test, fibrinogen, AC globulin and calcium are added, so that the concentration of thromboplastin is the important variable. Prothrombin consumption is abnormal in hemophilia, severe thrombocytopenia, and in the presence of a circulating anticoagulant, i.e., antithromboplastin. In parahemophilia, it is abnormal when fibrinogen and calcium are added. When the prothrombin dilution method, utilizing prothrombin-free plasma as the diluent, is used in parahemophilia the prothrombin concentration is normal because AC globulin is added in the diluent. In fibrinogenopenia it is normal because fibrinogen is added. These differences aid in the differential diagnosis of the coagulation deficiencies.

In severe deficiencies the bleeding time and capillary fragility may also be abnormal.

Anticoagulants are demonstrated by their effect on normal blood; i.e., the clotting time of mixtures is prolonged.

Clinically, the bleeding phenomenon in hemophilia, parahemophilia and SPCA deficiency may be mild, moderate or severe. Hemarthroses are common in hemophilia and rare in the few reported cases of parahemophilia and SPCA deficiency. Hemophilia is limited to the male sex; parahemophilia and SPCA deficiency have been reported in both sexes. These diseases are classically congenital and frequently familial and are characterized by distinctive laboratory findings. The bleeding phenomenon in liver disease is due to a decrease in prothrombin and SPCA since these factors are elaborated in the liver (Owren[7]). The abnormal Quick prothrombin activity in patients with parenchymal liver disease will not be affected by the parenteral (or oral) administration of vitamin K oxide, whereas the abnormal Quick prothrombin activity in patients with obstructive jaundice will return to normal when vitamin K oxide is administered intravenously (the hypoprothrombinemia in obstructive jaundice is due to interference with absorption of vitamin K from the intestines).

In conclusion, and since these diseases are diagnosed by laboratory tests, blood should be drawn for the necessary tests before transfusions are administered.

Fresh blood transfusions or freshly prepared plasma infusions will usually suffice to arrest the specific bleeding phenomenon in these patients.

In medicinally induced hypoprothrombinemia the intravenous administration of 50 to 100 mg. of vitamin K oxide will reduce the prothrombin activity to a safe level in a few hours. Protamine sulfate, 200 to 300 mg. intravenously, will neutralize the excess heparin where heparin is used as the anticoagulant. Cohn's plasma fraction 1 contains fibrinogen, of value in the treatment of fibrinogenopenia, congenital or acquired.

Patients with circulating anticoagulants are supported with blood transfusions. A trial of cortisone or ACTH is indicated here in accordance with the proposals that some of these anticoagulants may be antibodies.

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President's Page

HEALTH RESPONSIBILITY

WITHIN THE REALM OF CIVIC RESPONSIBILITY MENTIONED ON THE PRESIDENT'S PAGE ONE MONTH AGO, NO FIELD DEMANDS THE ATTENTION OF PHYSICIANS AND OF ORGANIZED MEDICINE TO A GREATER EXTENT THAN DO THE FIELD OF PUBLIC HEALTH AND THE AGENCIES, BOTH OFFICIAL AND VOLUNTARY, WHICH ARE CONCERNED WITH THE PUBLIC HEALTH.

CRITICISM THAT THE MEDICAL PROFESSION HAS IGNORED THIS FIELD IS NOT FOUNDED ON FACT. THROUGHOUT OUR STATES AND CITIES MEDICAL ORGANIZATIONS EXERT POSITIVE AND CONSTRUCTIVE INFLUENCE UPON THE PUBLIC HEALTH ACTIVITIES OF THEIR AREAS. A PHYSICIAN WHO DID NOT ALLOW HIS ATTENTION TO GO BEYOND THE INDIVIDUAL PATIENTS UNDER HIS CARE WOULD NOT HAVE MET ALL THE BROAD RESPONSIBILITIES OF HIS POSITION.

SINCE ITS ORGANIZATION IN 1817 THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA HAS BEEN ACTIVELY INTERESTED IN THE PUBLIC HEALTH OF THIS COMMUNITY. IT WILL CONTINUE TO FULFILL ITS FUNCTION IN THE FIELD OF PUBLIC HEALTH.*

Herbert P. Ramsay

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*See "Medical Society to Coöperate in D. C. Public Health" on page 429 of this issue.

Editorials

THE 1953 SCIENTIFIC ASSEMBLY

In a surprisingly short time October will be upon us, and aside from the hope of cooler weather that it brings, it has an even more important meaning to the members of the Society. October is the month of the Annual Scientific Assembly; this year's will be the 24th. These meetings had a small beginning, and as the enthusiasm of the members of the Society for them grew, so did the Assembly. It has been well over a decade now since it burst out of the auditorium of the Society and came to be held in the more spacious accommodations of the Mayflower. Soon those accommodations were too small, and in the last few years the Assembly has been held at the Statler. Even these facilities are now being strained by the increasing size of the meetings, and plans are being made for the Assembly in the coming year (1954) to be held at the Shoreham.

Along with the changes in the size of the meetings and exhibits, there have been changes in the methods of presentation, practically all for the better, and a greater reaching out for people of eminence to come and address the members and their friends on various topics. Some two or three years ago the general chairman experimented with simultaneous meetings in smaller rooms designed particularly to attract the interest of the specialists. These were mostly in the nature of panel discussions and created considerable interest and acclaim. This practice has been continued with increased success.

Last year, in addition to the scientific exhibits prepared by local groups and individuals, the chairman was able to induce prizewinning exhibitors from the AMA Convention to bring their exhibits to the Assembly, thus enhancing not only the elegance of the exhibits, but supporting the high quality as well. The success of this scheme was sufficient to include this feature in future Assemblies.

The Public Health portion of the exhibits and meetings had as small a beginning as the rest of the Assembly. The last decade has seen the formation of a number of local and national organizations interested in one or more specific aspects of public health. All have shown a great willingness to participate in the Public Health portion of the program, either by sending in exhibits or supplying topics and speakers or both. As a matter of fact, this portion of the Assembly is considered so important that this year the Public Health exhibits are being expanded to almost twice the size of previous years. If this trend keeps up we may well be faced with the situation of the tail wagging the dog, and in anticipation of such an event it might be well to completely divorce the Public Health portion of the program from the scientific portion of the Assembly and devote several days, consecutively, to its independent presentation under the aegis of the Society.

Possibly the most important single change that has been made in the structure of the Assembly, however, is in the field of social activities. It seems that we have neglected overly long expression of regard and appreciation for our secretaries. Consequently, on Tuesday night, October the 6th, the Medical Society is planning a subscription banquet (each doctor subscribing in accordance with the number of his office assistants who plan to attend). The speakers and entertainment will be drawn exclusively from the ranks of doctors. It is the hope

Opinions expressed in contributions to the Editorial Section are those of the writers and do not necessarily reflect the views of The Medical Society of the District of Columbia.

that a precedent will be established by this move. Put the date down now so that you won't forget it, and plan to attend YOUR ANNUAL SCIENTIFIC ASSEMBLY, planned by YOUR Medical Society, put on by YOUR colleagues, for YOUR entertainment and instruction.

JONATHAN M. WILLIAMS, M.D.
General Chairman, Committee on Arrangements,
24th Annual Scientific Assembly

COURAGE AND CONVICTION

It is one thing to have the courage of one's convictions, and quite another to hold on to a biased opinion as an honest conviction. Individuals, or groups of individuals, faced with differences can only reconcile them when a biased opinion or an honest conviction are recognized and accepted as such by both sides and where "fair play," "give and take," and good reason and judgment guide a discussion. Willingness to understand the problem and position of the "other side" makes for a reasonableness of discussion and a nonpartisan appraisal of the facts and leads to a fair settlement of the issue at hand. It is in this spirit of understanding that the problems that sometimes arise in the handling of "compensation cases" can best be solved in the interest of all concerned.

It should go without saying that the welfare of the injured employee is always the primary concern of the attending physician. The fact that the bill for services rendered is to be paid for by the injured employee's company or by its insurance carrier should not alter the treatment of the patient in any way. The Medical Society of the District of Columbia has adopted regulations for the guidance of physicians engaged in practice under the Workmen's Compensation Law (this applies to any member physician who examines and/or treats an employee accidentally injured on the job, or one suffering from an occupational disease). These regulations are not mandatory under the law, but surely they are morally binding on the members of the Society. Misunderstandings between patient and physician, physician and insurance carrier, and patient and insurance carrier occur from time to time. Any physician who has occasion to treat a patient under the Workmen's Compensation Law should thoroughly acquaint himself with the provisions of the regulations noted above. Likewise, he should be conversant with the provisions of the Law itself.

The Law is specific as to the obligations and rights of the physician, the employer, the employee and the insurance carrier. Should doubt arise in the mind of the physician as to the proper fee or appropriate handling of an individual case, a call to the employer and/or the insurance company will help to avoid misunderstanding. Insurance carriers have, by far and large, been found to be coöperative if the facts in the case have been presented clearly to them. Differences between physician and carrier have been settled amicably through the simple presentation of all known and pertinent facts to both parties. Most differences revolve around the question of the physician's fee and, in most instances, are due to the failure of the physician to seek an authorization and agreement with the insurance carrier where no set fee is established under the Society's fee schedule. Obviously, in the case of an emergency, appropriate medical care cannot and should not be withheld awaiting such authorization and agreement. This should be handled as promptly as possible and practicable after emergency care has been rendered, however. The question of unauthorized consultation has, from time to time, caused some misunderstanding. Again, except in emergencies, this should be avoided until an agreement with the insurance carrier has been reached.

The Deputy Commissioner of the District of Columbia Workmen's Compensation Board has ruled that the employer (if self-insured) or his designated insurance carrier has the legal right to designate the physician to treat the case, and when treatment in a hospital is necessary, the hospital to which a patient is to be sent. In a great majority of instances this creates no problem, but occasionally an insurance carrier is adamant in its stand with respect to this choice of physician. Even when an employee has indicated his choice of a capable and reputable physician, the carrier has refused to accept financial responsibility unless its own choice of physician is accepted. In my judgment, though legally proper, this occasional inflexible attitude is wrong and is not one in the best interests of the patient. It is believed that the close working relationship that the Society's Committee on Industrial Medicine now has with the representatives of the insurance carriers will eventually result in avoiding these situations.

I would call to your attention the fact that an arbitration committee composed of three members of the District Medical Society, appointed by the President of the Society, and three members of the Washington Claims Managers Council has been authorized to arbitrate differences concerning charges or other matters arising between physicians treating compensation cases and insurance carriers, including A & A cases in which the physician and the carrier have not been able to reach an agreement. When a difference arises, either the physician or the carrier may appeal to this Committee and request arbitration, with the understanding that the decision of the Committee shall be binding on both parties. The work of this Committee during the past year has been delayed considerably by failure of the interested parties to have at all times adequate information before the Committee in order that it may intelligently consider the merits of the case. Consideration is being given at this time to the information which must be had from the carrier and the physician in order to present it for arbitration. In this way we believe that the workings of the Committee may be facilitated, and a decision may be reached more quickly which is in the best interests of all parties concerned.

It behooves each of us to have the courage of our convictions. When differences arise between individuals or groups responsible for the over-all care of injured employees, let us be sure that this conviction is not confused with prejudice or bias because the patient is a "compensation case," and that the filing of reports and certificates does not annoy us to the point where the ultimate recovery of the patient is influenced or that his just rewards under the Compensation Act are delayed because of us. To do so would work a hardship on the injured employee. It would not be in the best tradition of American medicine.

R. Lomax Wells, M.D.
Chairman, Committee on
Industrial Medicine

THERAPEUTIC USES OF MUSIC

The use of music for therapeutic purposes certainly antedates any written record. Medicine men of almost all primitive peoples employed music in their ministrations. A song, a tune on a reed, or some deft thumps on a drum or gourd were the specific accompaniments of a vapor treatment, a massage, a cupping, or the giving of some herb. In some tribes of American Indians the sole treatment for some ailments was music. The Ojibwa medicine men effected their cures by sitting near the patient and singing. The Winnebago medicine man even healed wounds with song alone.

This close affinity of medicine and music was acknowledged by the ancient Greeks even in their mythology. Both medicine and music were placed under the jurisdiction of one god (Apollo) whose son was Aesculapius and whose grand-daughter was Hygeia. Greek philosophers did not scorn this mythical relationship. On the contrary they heartily endorsed it. Pythagoras,* much better known to sophomore geometry classes, proclaimed that man's soul is harmony. He advocated the daily use of music in a definite and prescribed manner for the maintenance of health. Plato not only regarded music as the medicine of the soul, but protested against its use for merely pleasurable purposes. He believed it should be reserved for education, and for the treatment of sick souls. It remained for Aristotle, however, to voice thoughts which seem to anticipate a modern text on psychosomatic medicine— "From these considerations it is plain that music has the power of producing a certain effect on the moral character of the soul, and if it has the power, it is clear that the young must be directed to music and must be educated in it—any one seems to have an inborn affinity with harmonious sounds and rhythms. Therefore, many wise men assert that the Soul is harmony, and since the Soul rules the body and music is akin to the Soul, appropriate melodies, harmonies and instruments must affect both body and Soul."

Probably the most famous example of musical therapy is that connected with tarantism, a disease caused (?) by the bite of a spider in the district of Apulia, in the heel of Italy. The disease was prevalent throughout the district in the hot summer months, but particularly in the city of Taranto, from which both the disease and the spider (tarantula) derived their names. The acutely ill person, recently bitten by a spider, would rush into the street, either clothed in strange garments—or not clothed at all—and begin to dance madly. This was no solo. There were always others, mysteriously smitten at the same time, and also the chronically ill who had been bitten many years before and who were suffering their annual recurrence during the hot weather. The dancing, which was fast and furious (the tarantella), would go on for hours. The only recognized form of therapy for this strange malady was fast music, which was administered until the dancers were exhausted.

Then as now there were skeptics. It was pointed out that the same spider could be found in other parts of Italy, and in Spain, where it apparently was not venomous. As an experiment some Apulian spiders were shipped to other parts of Italy, but they did not seem to tolerate travel very well. They lost their sting. The Italian physician Baglivi had a rabbit bitten by one of the spiders. The rabbit died in five days without doing anything that could really be called a dance. Dr. Clavitio in Naples allowed himself to be bitten by two spiders before six witnesses. Except for some local swelling the physician felt no ill effects, and he most certainly did not dance.* Other skeptics (scientists) tried a number of other remedies, such as cupping, bleeding, brandy and treacle, and diaphoretics. None of these remedies was successful. Perhaps it is pertinent to cite the opinion of Sir Thomas Browne about this curious disease since he was in Italy during the height of tarantism (latter part of the 17th century). Sir Thomas was no gullible layman, but a highly trained physician and philosopher who had obtained his medical education not only in England, but also in Italy, France, and Holland. He is the author of several famous books in which he attempted to combat the grosser errors prevailing in his day, such as, "That an Elephant hath no Joints," "That a Pigeon hath no Gall," "That a Beaver, to escape the Hunter, bites off his Testicles or Stones," "That a Kingfisher, hanged by the Bill, showeth where the Wind lay." Commenting on tarantism in 1672, Sir Thomas writes, "But since we observe that many attest it from experience; since the learned Kircherus hath positively averred it, and set down the songs and tunes solemnly used for it; since some also affirm the tarantula itself will dance upon certain strokes, whereby they set their instruments against its poison, we shall not at all question it."

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* To what extent this reverence for music permeated all the teachings of this master it is difficult to say. He was the founder of a religion whose chief tenets were a belief in the transmigration of souls and the commandment—"Thou shalt not eat beans."

* The validity of this experiment is somewhat open to question since the physician's wife claimed that he never could dance.

At any rate, the disease gradually died out during the 18th century, and the district of Apulia is now distinguished only by a somewhat higher incidence of hysteria and psychoneurosis than is found elsewhere in Italy, and by an unusually great number of mad dogs.

Since that time there has been no systematic use of music as therapy until recent years. True, Wm. Browne (no relation to Sir William) devoted an entire monograph, "Medicina Musica" (1729), to the subject and recommended specific types of music for specific diseased states such as "the Spleen" and "Vapours." But it was not until after World War I that experiments in this country and in Great Britain provided the impetus for the present widespread interest in the subject. Particularly important were the experiments conducted in the mental institutions of the state of Pennsylvania from 1920 on. Reports of these experiments stimulated studies by other hospital groups and by industrial psychologists. All seem to be agreed that some patients who respond not at all to the spoken word will respond to music. Agreement is pretty general also on the thesis that music as an adjunct or concomitant of other forms of therapy (e.g., hydrotherapy) deserves a regular place in the general program of a mental hospital. The kind of music administered, however, must be carefully selected, especially for the first few treatments. Larson, who reported the results of treating over 1,400 patients, found that striking improvement followed the administration of music only if it were strongly rhythmical. Melodious compositions without pronounced rhythm had little or no effect.

This salutary effect of music on the emotionally disturbed is not so surprising as its synergistic action in anesthesia. There are several reports claiming that the use of music has sharply reduced the need for pre-induction medication. When the administration of music is continued into the stage of anesthesia, it has been possible to secure satisfactory narcosis in dental patients with much lower concentrations of nitrous oxide (Cherry & Pallin). Although it is justifiable to suspend final judgment on these enthusiastic reports, until we can obtain further confirmation, continued experimentation should be encouraged. Certainly the dangers are almost nil. Side reactions and toxic effects are said to be rare, except for some mild nausea produced by Ravel's Bolero.

Of more direct interest to the general practitioner is the effect of music on his patient who is not only completely conscious but also practically sane. Undoubtedly all of us have had the disheartening experience of recommending two weeks in Florida to a poor fellow without the bus fare, a fishing trip to a man who loathes fish, or gardening to a woman who is allergic to everything that grows. And yet these people occasionally have to "get away from it all." For a couple of hours, at least, it is possible to get away from it all—from taxes, from tyrannical bosses, from sniffling children, from grouchy spouses, and from indwelling mothers-in-law. Phonograph records will do. Better yet are the free concerts throughout the summer by the Service bands on the Capitol steps and at the Watergate.

Yet, it is in the winter season when outdoor sports and pleasures are not so readily available, when we are under the pressures of ever mounting work loads—that is the time we are sorely in need of brief, refreshing vacations. Fortunately, these may be had at a very low cost. Every Wednesday night 2,500 to 3,000 people are whisked away to gently rolling, green hills, to stark mountains with torrential rivers and roaring waterfalls, to the peace of sacred temples, and to the land of the gods—all without leaving town. The excursions leave from Constitution Hall at 8:30 p.m. Swift and thoroughly satisfying transport is provided by a crew of 86 under the direction of Conductor Howard Mitchell.

MAURICE H. FRIEDMAN, M.D.

MILE POSTS TO HEALTH

The District of Columbia Survey of Medical Care for the Indigent and Related Services*

TUBERCULOSIS CONTROL PROGRAM

The District of Columbia has a tremendous problem in tuberculosis control. Only one state, in 1950 and 1951, (Arizona), and one city of 500,000 population and over, from 1947 to 1949 inclusive, (Baltimore), had a higher tuberculosis death rate. The death rate in 1950 of 48.4 per 100,000 population was more than twice the rate of the United States as a whole, 22.5.

The number of tuberculosis cases under supervision of the Health Department on January 1, 1952 was 5,735, or approximately 700 per 100,000, and is one of the highest rates in the United States. About 600 of these cases were active cases in the home without the benefit of hospital care, while 1,483 cases were hospitalized.

Although the District of Columbia has made some progress in providing facilities and personnel needed to combat the disease, considerably more are required before this community can be considered to be adequately supplied.

Several chest clinics which diagnose, treat, and follow up tuberculosis cases are operated by various divisions of the Health Department and hospitals in the District of Columbia. All of them have large case loads, and all of those operated by the Health Department are inadequately housed and understaffed, which is also true of the large clinic at Freedmen's Hospital. Improved facilities and more personnel are vitally needed and a better coördination of the over-all program should be effected. Closer liaison is to be desired between the various chest clinics. No social service is available to the Health Department clinics and is urgently needed.

The public health laboratory facilities for the Health Department are grossly inadequate. This inadequacy is evidenced by the fact that in 1951 only 80 cultures for tuberculosis, 22 animal inoculations, and 5,753 smears were performed. Gastric lavages are not done in the clinics of the Bureau for Tuberculosis.

The follow-up of cases is the joint responsibility of the Bureau for Tuberculosis and the Bureau of Public Health Nursing. It is estimated that 28.6 per cent of the total nursing time is spent in chest clinics, home care, and follow-up, the time being equivalent to the services of 35 nurses. In spite of the nursing time devoted to the tuberculosis control program, more stress needs to be given to improving nursing services, especially in view of the new home care program.

There are 1,078 beds available in 4 institutions for treatment of District of Columbia residents, which include 660 at Glenn Dale Sanatorium, 260 at Gallinger Municipal Hospital, 107 at Upshur Street Hospital, and 51 at Freedmen's Hospital. The Upshur Street Hospital is in an old building, nonacceptable by hospital standards. The Gallinger Hospital unit was designed for 226 beds and is greatly overcrowded, and an additional 40 tuberculosis patients, on an average, are cared for on the medical wards. Glenn Dale Sanatorium is also fast becoming obsolete as a hospital. Despite deficiencies in the physical plants and insufficient personnel to adequately staff them, good programs include all medical, surgical, and ancillary services that good tuberculosis hospitals should have. However, most services are not as complete as they should be. Admissions are controlled by the Bureau for Tuberculosis through its Hospital Registry.

The need for more tuberculosis hospital beds is imperative. In 1952 there were around 600 known active cases in the community outside of institutions; 33 per cent of those leaving the institutions leave against medical advice; 72.5 per cent of the active cases in three institutions are far advanced when most of them should be in less advanced stages of the disease, and two thirds of the annual deaths have had less than 60 days of hospital care.

The rehabilitation program in the sanatoria is operating efficiently, largely through the stimulus and financial support of the District of Columbia Tuberculosis Association with the assistance of the D. C. Rehabilitation Service. However, increased support by the District Government of this worthy phase of the program is urgently needed.

The requirement of a financial investigation is working a hardship on many families and is the cause of many infectious patients refusing hospitalization or leaving against advice after being admitted.

The nonresident problem is particularly acute in the District of Columbia. Strict proof of residence, one year or longer, is required and is said to discourage patients from seeking hospitalization in some cases.

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* Abbreviated portions of the report of the Survey have been appearing in the MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA from month to month. This is the third installment.

Case-finding received a great stimulus in 1948 when about 50 per cent of the adult population of the District of Columbia received chest X-rays in a community-wide mass survey. Several hospitals and outpatient departments have miniature X-ray equipment, but more effective use should be made of them. Routine X-raying in penal and mental institutions has been neglected except in St. Elizabeths Hospital. The Health Department has not had the personnel to carry on a continuous effective miniature X-ray survey program except in their clinics where the number of X-rays has not been great due to crowding and insufficient personnel.

The major recommendations for improving the tuberculosis program are given below:

1. That an organizational pattern be established for the program of tuberculosis control under one administrative head responsible for carrying out the over-all policies of the program.

2. That a tuberculosis coördinating council be appointed to advise the Director of Public Health in bringing about better coördination and integration of the program.

3. That immediate steps be taken for the construction of 300 new tuberculosis beds, and that the possibility of setting aside additional beds for tuberculosis at Gallinger Hospital be seriously considered (150 beds considered a possibility).

4. That immediate plans be formulated for the acquisition of a conveniently located central clinic facility and that voluntary hospitals be encouraged to establish chest clinics, being adequately reimbursed by the Health Department for services rendered to medically indigent patients.

5. That the District of Columbia support more adequately the ancillary facilities and provide personnel in the tuberculosis hospitals.

6. That the case-finding phase of the program be strengthened by establishing a mobile photofluorographic unit and by supporting general hospitals in a program to X-ray the chests of all admissions and all employees.

7. That public health laboratory facilities for tuberculosis be improved.

8. That in view of the communicability of tuberculosis and the hardship payment for hospitalization works on families of tuberculosis patients, hospitalization be furnished at public expense to all District of Columbia residents.

9. That the current interpretation of residency requirements be relaxed to permit hospitalization of tuberculosis patients without proof of residence, as present restrictions impose hardships upon such patients awaiting hospitalization. That such patients who cannot prove District residency and cannot be turned over to their state of residence be provided hospitalization within the District. This should include noncitizens. That this problem be studied and, if necessary, that the Congress be asked for an appropriation to care for such persons.

10. That a more adequate home care program for tuberculous patients be instituted immediately supplementary to hospital care.

11. That better salaries be provided to personnel in key positions in line with salaries in other communities of comparable size.

Recommendations on Tuberculosis

1. That more adequate classifications and salaries be provided for key professional positions and that higher ratings be assigned to some in other categories which are rated so low that it is difficult to recruit personnel.

2. That a review of the classification and salary range of nonprofessional clerical workers be made by the Personnel Division of the Department of Administration, District of Columbia Government.

3. That a medical assistant and nonmedical staff assistant of high calibre be added to the staff of the Bureau for Tuberculosis to relieve the Director of many detailed clinical duties requiring interviewing of patients and close medical supervision and administrative details not requiring medical judgment, freeing his time for coördination and over-all direction of the complicated program.

4. That a tuberculosis coördinating council be established to advise the Director of Public Health in bringing about better coördination and integration of the program within the Health Department and to help in the coördination of the over-all program of the District of Columbia by integrating as well as possible the programs of the other official and voluntary agencies. This council should be composed of members of all agencies vitally concerned in the

program such as the Health Department, Tuberculosis Association, Medical Societies, United Community Services, Veterans Administration, and members of the various medical schools. (This program would make more effective certain community efforts offering services in the same fields which are needed but which operate without optimum coördination or integration, causing some duplication of service to individuals seeking medical care.)

5. That immediate plans be formulated for the acquisition of a conveniently located central clinic facility at a well planned location to replace the C Street and Polk Chest Clinics. There should be a separate unit within the facility for handling case-finding among food handlers, contacts and the general public.

6. That in the interest of the extension of the program for detection, prevention and control of tuberculosis, it is recommended:

a. That the District of Columbia Health Department contribute toward the support of programs in the District of Columbia hospitals for the routine chest X-ray examination of all admissions to both in- and outpatient services. The support of the program could with advantage include all hospital personnel.

b. That the voluntary hospitals of the District of Columbia be urged to establish chest clinics in their outpatient departments and that the clinics be adequately reimbursed by the Health Department for services rendered in these clinics to medically indigent and indigent patients.

7. That a mobile photofluorographic unit be established for the purpose of tuberculosis case-finding.

8. That plans be made to improve, streamline, integrate and cut out unnecessary duplication and detail in the present clinical record systems, nursing records and filing systems, hospital registry and central registry. It appears that there is a considerable amount of unnecessary time spent in clerical work not only by clerks but also by nurses and physicians. Adoption of such an integration of programs as proposed above will make some revision of the record systems mandatory.

9. That the Health Department Laboratory facilities are grossly inadequate and should be improved by increasing the budget to provide the personnel, equipment and improvements necessary to give the clinics the special diagnostic laboratory services needed.

10. That laboratories for routine procedures be established in all chest clinics.

11. Until beds are available, the acute shortage of beds can be alleviated to some extent by altering the present home care program embodying the principle of that now in operation in Cleveland. (In this program, cases thought suitable for pneumoperitoneum and combined streptomycin-PAS therapy are admitted for 3 days during which pneumo- and antibiotic therapy is started and phrenic done if indicated. The patient is discharged and comes into the clinic 2 times weekly for shots and refills. When possible, the "shots" are given in the home. He remains on the waiting list, and when he comes up for admission his case is reviewed; in the Cleveland experience 25 per cent do not need admission but can continue on home therapy, and those who are admitted have done better than those admitted before this program was begun. This program is not considered as a substitute for beds and is to be discontinued as soon as their new sanatorium addition is opened.)

12. That, in view of the immediate pressing need for more beds, the possibility of setting aside additional beds for tuberculosis at Gallinger Hospital be investigated. The present policy placing restrictions on admission of medically indigent nontuberculous patients to 8 contract hospitals except under certain circumstances should be reviewed with the object of releasing additional beds at Gallinger for handling tuberculous patients. (Since the occupany rate for the general hospital beds of Gallinger Hospital for 1951 was 58.3 per cent,* it should be possible through rearrangement of services to set aside wards for care of tuberculous patients. There is an average of 40 tuberculous patients now on the general medical wards, and it would appear to the best interest of the hospital to do this as soon as possible. A general hospital of the type and character of Gallinger Hospital should run approximately 75 per cent occupancy. Since there are 939 general hospital beds, it should be possible for them to provide 16 per cent of them or 150 additional beds for tuberculosis.)

13. That immediate steps should be taken for

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* District of Columbia Hospital Construction Plan, 2nd Revision, 1952, page 18.

the construction of 300 new tuberculosis beds in addition to the 150 beds that may be provided at Gallinger Hospital as above. (The facts are that there are usually 140 to 191 on the hospital waiting list, that 610 active cases are known to be present in the community outside of institutions, that better case-finding will discover many of the cases now dying before any significant amount of effective treatment can be given [two thirds of the annual deaths have had less than 60 days of hospital care], that improved treatment is lengthening average hospital stays.)

14. That an organizational pattern be established for the program of tuberculosis control under one administrative head responsible for the carrying out of the over-all policies of the program.

15. That the prerequisites for the position of Director of the Division of Tuberculosis Control include a Master of Public Health degree.

16. That the ancillary facilities and personnel in the hospitals and clinics be increased and augmented in an effort to prevent the high rate of discharges against medical advice, 33 per cent last year, and bring about more adequate rehabilitation of discharged patients in order to reduce relapses to a minimum and make them self-supporting. This would include more medical social workers in the hospitals and clinics (none in clinics at present), additional occupational therapists, teachers and physiotherapists, assumption of the responsibility for salaries of the vocational counsellors by the District of Columbia, and provision of salaries for librarians. Improved facilities for rehabilitation should be provided. The Upshur Street Hospital should be continued until such is accomplished.

17. That the public health nursing procedures in force should be studied for adequacy of organization, staff and program content.

18. That the requirement of a financial investigation and payment from those thought able to pay be eliminated and that hospitalization be furnished at public expense to all residents of the District of Columbia who need hospital treatment for tuberculosis.

Only a small amount of the total operational cost can be collected from pay patients. Many patients in the infectious stage do not accept hospitalization and leave against medical advice because of the requirement to pay while many patients exhaust their financial resources and are left dependent after discharge. More and more states are recognizing that the care of the tuberculous is their responsibility. These are all good arguments for discontinuing the means test.

19. That the current interpretation of residency requirements be relaxed to permit hospitalization of tuberculous patients without proof of residence, as present restrictions impose hardships upon such patients awaiting hospitalization. That such patients who can prove District residency and cannot be turned over to their state of residence be provided hospitalization within the District. This should include noncitizens. That this problem be studied and, if necessary, that the Congress be asked for an appropriation to care for such persons.

20. That laboratory facilities at Glenn Dale Sanatorium be expanded by the provision of more space, equipment and personnel in order to meet the increasing demands made on it through the constantly increasing antibiotic therapy and surgical programs and the more exacting studies needed to determine activity status of tuberculous patients.

21. That official morbidity statistics include only cases living in the District of Columbia and be classified by activity status in accordance with the policy recently adopted by the State Directors of Tuberculosis Control.

22. That if active cases and suspects working in the District of Columbia but residing outside are followed, all statistics on that group should be kept separate.

23. That programs of research and teaching be developed in the tuberculosis clinics and hospitals of the District of Columbia Health Department in conjunction with medical schools and other agencies which sponsor such research and teaching.

Venereal Disease Control

Despite great gains made in the control of the venereal diseases, there exists in the District of Columbia a serious venereal disease problem. Comparing venereal disease reported case rates in the District of Columbia with those of 18 major cities in the United States (500,000 population and over) the District ranks first in terms of early syphilis, first in terms of total syphilis, and first in gonorrhea. The District of Columbia's syphilis case rate of 441.22 per 100,000 population for fiscal year 1952 unquestionably ranks the District as having the number one venereal disease problem in the Nation.

The venereal disease control program for the medically indigent seems well balanced, providing adequate clinical, case-finding and education services. There are 60 full-time and part-time medical, nursing, laboratory, investigation and clerical personnel engaged in the program.

Syphilis cases are treated with penicillin and treatment can be completed within 5 to 15 days depending on the stage of the disease. Gonorrhea is treated with one injection, 600,000 units, of penicillin.

The total funds and services available including special project grants of the Public Health Service for venereal disease control approximated $280,000 in 1951 and a similar figure for 1952. Based on broad estimates, the cost per new admission in 1951 was $10.37 and the cost per clinic visit was $2.12.

The Bureau is presently conducting an aggressive case-finding program which consists for the most part of intensive contact investigation and venereal disease information and education. Two thirds of the interviewing and investigation is accomplished by male lay investigators, the remainder of the field work on the familial contacts and syphilis in pregnancy being provided through the generalized nursing program.

The Social Hygiene Society of the District of Columbia, organized in 1918, has been mainly responsible for securing sound and comprehensive venereal disease control laws and regulations for the District.

A review of the number of venereal disease cases reported by hospitals clearly indicates that in terms of reported cases, excluding Gallinger, this service does not constitute a major activity of the various hospitals.

Specific information is not available on the extent of private physician contribution to the medically indigent venereal disease patient. It is felt that morbidity data are not at all indicative of the extent of the private physician's participation and contribution to the venereal disease problem. The private physician simply does not report venereal disease cases in the District of Columbia.

The Venereal Disease Technical Committee recommends that:

1. In order to provide the most effective clinical facilities, venereal disease diagnostic and treatment services should be concentrated in a centrally located public health center.

2. Provision should be made to provide clinical material for teaching in the medical school. Perhaps a system of rotation of residents through the venereal disease clinics of the public health center with compensation by the Health Department should be explored.

3. Special efforts should be made to stimulate reporting of syphilis and gonorrhea by private physicians and coöperation by such physicians in the general community program. Perhaps through more intensive services being rendered by the Health Department to the private physician in respect to diagnosis, treatment, follow-up and education, this objective may be reached.

4. Greater attention be given to the finding and treating of persons infected with gonorrhea.

5. Through the utilization of all proven health education media, the committee strongly urges the continuance and expansion of the educational-informational program.

RECOMMENDATIONS OF THE VENEREAL DISEASE TECHNICAL COMMITTEE

It is recommended that:

1. In order to provide the most effective venereal disease clinic services at minimum cost, all Health Department supported and/or supervised venereal disease clinics or clinic services, with the exception of those involved with the teaching of medical students, should be consolidated and centralized.

2. In order to provide adequate clinical facilities, venereal disease diagnostic and treatment services should be concentrated in a centrally located Public Health Center.

3. In order to provide clinical material for teaching, the possibility of incorporating the venereal disease clinics into the medical school and hospital residency system by rotation of residents through the venereal disease clinics of the Public Health Center with compensation of the residency system by the Health Department should be explored.

4. In order to give wide city coverage, a joint effort should be made by the Health Department, the District of Columbia Medical Society and the Medico-Chirurgical Society to develop plans for

increased coöperation and participation by the private physicians in the venereal disease control program.

5. Since venereal disease is a communicable disease, occurring in large numbers of people, venereal disease patients applying for services at Health Department facilities should continue to be exempt from a means test and residency requirements.

6. Recommendations should be made concerning Health Department and D. C. Government administration, which would include the following:

a. Salary scales for venereal disease control personnel in comparable cities should be studied to ascertain whether or not the District of Columbia salaries are sufficient to attract and keep trained and experienced personnel. The turnover of professional personnel has been much higher than desirable.

b. The Commissioners' policy, in reference to travel and per diem, should be so modified that venereal disease control personnel could take advantage of additional training opportunities, and funds should be made available for that purpose.

c. There should be continuity of education for the public and legislators on current conditions to the end that sufficient resources be provided for the essential control program.

7. The largely unsolved problems connected with finding and treating persons infected with gonorrhea should receive additional attention in the future. As many physicians have said, "Gonorrhea is still a stepchild in the venereal disease control program."

8. Efforts should be continued to secure coöperation from private physicians in the reporting of their venereal disease cases.

9. Your committee strongly urges the continuance of health education efforts in the venereal disease field through both official and voluntary resources. Health authorities throughout the country are unanimous in believing that many in the current reservoir of unknown cases can be located and treated only through the utilization of all proven health education media.

MEDICAL SOCIETY TO COÖPERATE IN D. C. PUBLIC HEALTH

On July 1, the Executive Offices of The Medical Society of the District of Columbia issued the following news release:

The Medical Society has released a letter from the new President of the Medical Society, Dr. Herbert P. Ramsey, to Dr. Daniel L. Seckinger, Director of Health, offering assurances of coöperation with the Health Department in developing "better and better health programs for the people of Washington." Dr. Ramsey has previously announced that physicians of Washington are intensely interested in public health facilities and accomplishments, and has stated that the Society will give special attention to these matters in 1953 and 1954, continuing and emphasizing the Society's long-standing interest and participation in matters of public health concern.

The text of the letter follows:

MY DEAR DR. SECKINGER:

Tomorrow, July 1, I am expected to assume my duties as President of the Medical Society of the District of Columbia.

This occasion affords the opportunity to express to you the continued and increasing interest of the physicians of the District of Columbia in the health of our people and hence in the activities of all health agencies, both voluntary and official.

We, therefore, offer you the coöperation of the facilities and committees of the Medical Society of the District of Columbia in developing health programs, and the Society hopes to be in a position to offer constructive criticism.

We are certain that the Health Department will welcome this coöperative endeavor to provide better and better health programs for the people of Washington.

Below follows a list of committee chairmen who have been requested to keep currently informed as to activities and needs in their respective fields, and they will be in touch with the Health Department from time to time. We will appreciate it if data requested by them can be furnished.

Committee on Public Health—George Maksim, M.D.
Subcommittee on Alcoholism—Earl H. Mitchell, M.D.
Subcommittee on Child Welfare—Milton M. Greenberg, M.D.
Subcommittee on Diabetes—F. Clarence Rice, M.D.
Subcommittee on Diseases of the Chest—Sol Katz, M.D.
Subcommittee on Maternal Welfare—David H. Kushner, M.D.
Subcommittee on Mental Health—Robert H. Groh, M.D.
Subcommittee on Venereal Disease—W. Dabney Jarman, M.D.

Committee on Cancer Control—Theodore J. Abernethy, M.D.

Committee on Industrial Medicine—R. Lomax Wells, M.D.

Committee on Medical Care—Ernest A. Gould, M.D.

Very sincerely yours,
Herbert P. Ramsey, M.D.

The following reply was received:

Dear Doctor Ramsey:

Reference is made to your letter of recent date, in which you express your interest and that of the physicians of the District of Columbia in the health of our people. We note with great pleasure that you offer the coöperation of the facilities and committees of the Medical Society in developing health programs.

In this connection, as you well know, the health picture changes from time to time and we are now approaching that period when more emphasis should be placed on chronic illness, treatment and rehabilitation. Fortunately, due to improved methods of public health, the number of communicable diseases has practically reached the vanishing point. There remain, however, tuberculosis and poliomyelitis as major communicable disease problems in the District of Columbia. The community is now spending about five million dollars per year in the tuberculosis control program. It is well within the realm of possibility that this disease could be entirely eliminated, or at least reduced to the degree that many other diseases have been controlled within our generation. I particularly commend this as a worthy subject for the consideration of the Society.

With reference to poliomyelitis, it now seems that before too long a sufficient amount of gamma globulin, or other protective agent, may be available to prevent crippling and other unfortunate conditions associated therewith.

We wish to congratulate you upon your ascendency to the Presidency and hope that your term will be bountiful and fraught with much good for the community.

Very sincerely,
Daniel L. Seckinger, M.D., Dr. P.H.
Director of Public Health

BOOKS RECEIVED

Acknowledgment is made of the following books which have recently been received. Selections will be made for more extensive review in the interests of our readers and as space permits. Physicians are urged to submit reviews of additional current books which, in their opinion, merit comment.

Twenty-five Years of Sex Research; History of the National Research Council Committee for Research in Problems of Sex, 1922–1947. Sophie D. Aberle, member of the National Science Board of the National Science Foundation, and George W. Corner, Carnegie Institute of Washington. Price, $4.00. Pp. 248. Philadelphia: Saunders, 1953.

Surgery of the Pancreas. Richard B. Cattell, M.D., Surgeon, The Lahey Clinic, New England Baptist Hospital, New England Deaconess Hospital; and Kenneth W. Warren, M.D., Surgeon, The Lahey Clinic, New England Baptist Hospital, New England Deaconess Hospital. Price, $10.00. Pp. 374, with 100 figures. Philadelphia: Saunders, 1953.

The Surgery of Infancy and Childhood; Its Principles and Techniques. Robert E. Gross, M.D., D.Sc., William E. Ladd Professor of Children's Surgery, The Harvard Medical School; Chief of Surgical Service, The Children's Hospital, Boston. Price, $16.00. Pp. 1000, with 1488 illustrations on 567 figures. Drawings by Etta Piotti. Philadelphia: Saunders, 1953.

Therapeutics in Internal Medicine, 2nd ed., completely revised and reset. By Eighty-four Authorities. Edited by Franklin A. Kyser, M.D., F.A.C.P., Assistant Professor of Medicine, Northwestern University Medical School, Chicago; Attending Physician, Evanston Hospital, Evanston, Illinois. Price, $15.00. Pp. 830. New York: Hoeber, 1953.

Collected Reprints of the Grantees of the National Foundation for Infantile Paralysis for 1952, Volume XIII, Parts I and II. Publication No. 33 M. New York: National Foundation for Infantile Paralysis, 1953.

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THE DOCTOR'S INVESTMENTS—PLANNING FOR AND AGAINST TOMORROW*

THEODORE WIPRUD

Secretary, The Medical Society of the District of Columbia

Some years ago I discovered an old book in the third floor storage room of the Medical Society Building entitled, "How to Succeed in the Practice of Medicine" by Dr. McDowell Matthews, President of the American Medical Association in 1898–99. Most of this book, of course, is outdated but, when allowances are made for the great changes which have taken place in a half century, Dr. Matthews has some essentially sound, if sometimes humorous, advice to give physician investors.

> "Having now prospered by the pursuit of your profession in a business way," Dr. Matthews wrote, "you notice at the end of each year a surplus. What are you to do with it? Don't squander it or spend it in riotous living and ways of extravagance. You have been frugal in obtaining it; do not grow reckless and spend it 'in a night.' Beware of the peddler, the shyster, and the lightning-rod man, for the buying of gew-gaws has bankrupted many. Don't imitate Mrs. Smith, who bought a doorplate with the name of Jones on it arguing that 'It may be, after Mr. Smith dies, that I will marry a man by the name of Jones.' Beware also of the man who under the guise of friendship beguiles you by telling of an investment that is sure to profit you a hundred percent, but more likely a thousand. A gold or silver mine, an oil well, or cheap lands that are filled with minerals, yea to overflowing; a patent that is to revolutionize the world and bring you millions.... Listen attentively to these gentlemen, not too long, and if persistent throw them out of the back window, and if you break their necks you will be doing the public a great service, and will throw around your family a mantle of protection."

One morning in May of this year I was thumbing through the *Washington Post*, as I do regularly at breakfast, when my attention was drawn to the headline, "Surgeon Papers Wall with Father's Stock." Above the headline was a picture of Dr. Robert U. Cooper, a Washington surgeon, and his family in the room with the unusual wallpaper.

Although Dr. Cooper has been a member of our Medical Society for several years and is the author of a recent book entitled, "Investments for Professional People," which I had read with considerable interest, I did not know him too well personally. Nevertheless, I was certain that he would be glad to discuss with me his views on investments. As expected, he graciously acquiesced. In the course of our conversation, Dr. Cooper had this to say:

His father, the late Arthur E. Cooper, a Lutheran minister in Pennsylvania, had as a hobby the investment of any surplus funds he came by in speculative stock. As one might guess, the funds he had available for this venture were meager. However, he invested all he had. With few exceptions, the stocks went sour and all he had to show for his money was a stack of beautifully engraved certificates sufficient to paper the hallway of Dr. Cooper's home. In fact, there were enough left over to do the den, but his wife put her foot down.

This background undoubtedly accounts for Dr. Cooper's interest in investments. Much of what I have to say in this article is in line with Dr. Cooper's thinking. So, in a sense, this article is a joint effort.

Perhaps, I should make it clear now that my comments on investments will not be directed to those among you who have accumulated a large enough estate to permit you to take chances with surplus funds. You can afford the luxury of the long-shot investment; however, you are very much in the minority.

My concern is with the physician who has an average to somewhat considerably better than average income. Between these brackets are to be found the large majority of the medical profession. It is they who must conserve their funds in such a way that their families are protected against financial distress and they themselves assured an old age free from worry over finances.

Security in old age is especially important to physicians because they do not come under the Social Security law. They must protect themselves against the vicissitudes of old age. This requires thoughtful planning and frequently the advice of those expert in financial matters.

Basically the plan which I propose is simple. Its essentials in the order of their importance are: (1) an adequate life insurance program including its investment features; (2) a home and possibly other real estate holdings; (3) Government bonds; and (4) a diversified list of securities, i.e., stocks and bonds, weighted on the safe side.

Whether a doctor's means will permit him to take advantage of all the features of this program will, of course, depend upon many factors. One physician is restricted in his investments because of his heavy overhead both at home and at his office. Another has reached the stage where he has no dependents and finds it possible to take advantage of many investments which would not be possible for his less favorably situated colleague.

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* Delivered at the Annual Session of the Colorado State Medical Society in Estes Park, Colorado, September 12, 1952.

Most physicians in the income brackets which I have mentioned must be content to limit their investments to the first two categories—life insurance, a home, and possibly a few other real estate holdings. The reasons for this are obvious—a continually rising standard of living, high taxes, and spiraling prices.

Life Insurance Including Its Investment Features. While most physicians must be content to build their investment programs largely upon life insurance, there need be no regrets on this score, for, as one authority said recently, "Life insurance is the foundation of most successful estate plans today." He points out that 86 million Americans now own over 250 billion dollars worth of life insurance in companies having assets of 68 billion dollars.

Life insurance purchased by the doctor must first of all meet his needs, which vary considerably at various stages in his life; and it must also be within his ability to finance. To accomplish this, he should seek out a life insurance representative who he has ascertained is a man of unquestioned integrity and ability. His judgment and advice are all-important and should be followed.

Basically, there are four types of life insurance:

1. Ordinary life insurance is, of course, the most common form of protection. It is more frequently purchased, because it gives the greatest protection at a low annual premium. One of its features is its modest but increasing cash value. On proper notice, one can borrow on a policy, or cash it in, obtaining a certain percentage of premiums paid and earnings accrued if dividends are not withdrawn at the time premiums are paid.

An ordinary life insurance policy can be converted, if the holder wishes, into a more desirable type of insurance from an investment standpoint. That may be desirable when the holder no longer has dependents and saving is more important than protection.

2. Limited payment life insurance is for the buyer who wishes to be certain that if, in his later years, his earning power should stop or be reduced to a point where he cannot carry his insurance, it will be paid up. Higher premiums are in effect on these policies, payments being required for a specified period of time—10, 20, or 30 years, as the case may be. When paid up, the insurance continues in force indefinitely. The difference between ordinary life and limited payment life insurance is only that of the term during which the payments are made, except that the cash or loan value of the latter is greater.

3. Endowment insurance provides the purchaser a means of saving and at the same time affords needed protection for his dependents. This type of insurance is written for a specified number of years, at the end of which time the policyholder collects the face value of the policy. If he dies before the date the policy matures, his beneficiaries are paid specified monthly payments.

For the younger physician, the endowment policy is very desirable, and, if he is wise, he will make this investment early in his professional career. He should, however, limit the amount purchased to conform to his means.

4. Term insurance has no investment value, and affords protection and nothing more. Should the policyholder wish to convert a term policy into another form of insurance, he can usually do so without the necessity of a physical examination. For the individual who is a heavy borrower, or whose financial affairs are in a precarious situation, it is a means of protecting his creditors or dependents over a limited period.

These are the basic forms of life insurance on which any number of combinations have been worked out to meet varying needs. Some large insurance companies write as many as 100 different kinds of insurance policies. There are such features as insurance to assure the policyholder's children of a college education and protection against loss of family income. The first I am sure you are familiar with; the latter is desirable when the physician has young children. For instance, a doctor, aged 35, with children 4 and 2 years of age, and still in debt for his education, home, equipment, and so on, needs maximum protection at the least possible cost. He can purchase an income protection contract at a small premium cost which will guarantee his family an income for a specified number of years, usually until his children are of age.

As to the amount of life insurance which an individual should carry, the insurance companies and investment advisors generally recommend that 10 per cent of the gross income be considered a minimum for premium payments.

Although annuity policies are not life insurance, but an investment, they are purchasable from life insurance companies. The income from annuity policies is low, but they are to be commended for several reasons, among them, safety, and the assurance that, at their maturity, the payments will be made either to the holder of the annuity or to his beneficiaries in the manner he has directed. Annuity policies have a paradoxical virtue, and that is that the purchaser stands to lose materially, in the first few years at least, unless he makes regular payments.

The Purchase of a Home and Other Real Estate. One of the doctor's first needs is a home in which to establish himself as a part of the community. While in the usual sense this is not an investment, it is in fact one of the most important in the physician's career. The surroundings in which he raises his family have a tremendous influence not only on them but on his practice. It may become also a profitable investment from a dollar and cents point of view.

Unfortunately, some physicians have thought it desirable to own very expensive homes, sometimes beyond their means. An estate analyst told me as recently as last month of a physician who was so harrassed by payments on his home that he was unable to buy insurance or any sort of protection for himself or his family.

What a physician pays for his home should, of course, have some relation to his income. It will also vary with the purchasing power of the dollar, and local conditions. Some banks advise that the purchase of a home be based on "total occupancy costs" as compared to the buyer's annual income. They advise that he not commit himself to pay more than 20 per cent of his income for occupancy costs.

Many physicians have done well in the real estate investment field. Usually they have had a sound knowledge of property values in the community where they make their purchases. Those who are not expert in such matters should seek advice, preferably from some officer in the bank where they do business.

There is much to be said for the safety of judicious real estate investments. Over a long period the returns are often very satisfying.

Government Bonds. There is no need for me to hold forth at any length on the desirability for purchasing U. S. Government bonds. They rate A-plus when it comes to safety and a guaranteed return on one's investment. It is significant that the largest insurance companies have invested substantially in Government bonds. Some figures furnished me recently will interest you. The Metropolitan Insurance Company invested 29.8 per cent of its funds in Government bonds in 1951; Prudential Insurance Company, 25.6 per cent; Equitable Assurance, 18.0 per cent; John Hancock Insurance Company, 20.0 per cent, and New York Life, 23.0 per cent.

A Diversified List of Securities. All of this article might have been devoted to a discussion of stocks and bonds, but I am going to limit myself to a few general observations. The first is that there are many safe securities of this type; for example, there are industrial bonds which are as stable as the Federal Government; the same is true of a smaller number of stocks. However, there are hundreds of securities on the market from which to choose, and my advice to those of you who are inexperienced in this field is to seek advice from a trust or other officer of a bank or from an investment firm which you have ascertained is reliable.

Again using as a measuring stick the judgment of one of the largest insurance companies, the Metropolitan Life Insurance Company invested 43.1 per cent of its funds in various types of bonds in 1951 and only 1.4 per cent in stocks.

Most of you recognize that there are other types of investments that might have been considered in this paper; however, those mentioned, especially the first 2, I believed would be of most interest to you.

Before closing, I would like to mention 3 other factors which have a vital bearing on the adequacy of the physician's investment program: his financial records, his will, and other essential insurance.

Bookkeeping is merely the recording of financial

(*Continued on page 444*)

News and Personals

The 31st Annual Scientific and Clinical Session of the American Congress of Physical Medicine and Rehabilitation will be held at the Palmer House, Chicago, August 31, September 1–4, 1953. Members of the American Medical Association are welcome at all sessions. In addition to the scientific program there will be annual instruction seminars. These lectures will also be open to physicians as well as to therapists who are registered with the American Registry of Physical Therapists or the American Occupational Therapy Association.

Full information may be obtained by writing to the Executive Offices of the Congress, 30 North Michigan Avenue, Chicago 2, Illinois.

The 18th Annual Congress of the United States and Canadian Sections of the International College of Surgeons will open at the Waldorf-Astoria in New York on Sunday evening, September 13, with a session open to the public. At this meeting Dr. Richard H. Shryock, Director of the Institute of the History of Medicine of Johns Hopkins University, will speak on "Fame in Surgery." The scientific program will begin on Monday morning, September 14. A special feature of this Congress will be five sessions for operating room nurses. The annual Convocation will be held on Thursday evening in Carnegie Hall. All of the meetings will be held at the Waldorf-Astoria except the Convocation.

The IV Congress of the Pan American Medical Women's Alliance will be held at the Beekman Towers Hotel, First Avenue and 49th Street, New York, from September 24 through October 1, 1953. The morning hours will be given over to a scientific program of general interest. There will be round-table luncheon discussions with leaders speaking Spanish and English. Through the sponsorship of leading New York medical women those interested in a special field will have opportunities to attend clinics of their choice.

The Medical Women's Association of New York is serving as hostess and is planning a variety of social activities. Hotel reservations should be made direct with the hotel. The registration fee is $10.00. Physicians planning to attend the Congress should write in advance to Dr. Ina A. Marsh, 140 Linwood Avenue, Buffalo 9, New York.

The American Urological Association offers an annual award of $1,000 (first prize $500, second prize $300, and third prize $200) for essays on the result of some clinical or laboratory research in urology. Competition shall be limited to urologists who have been in such specific practice for not more than 10 years, and to men in training to become urologists.

The first prize essay will appear on the program of the forthcoming meeting of the Association, to be held at the Waldorf-Astoria, New York, May 31–June 3, 1954.

Full particulars may be secured by writing to the Executive Secretary, William P. Didusch, 1120 North Charles Street, Baltimore. Essays must be in his hands before February 1, 1954.

The Arthritis and Rheumatism Foundation is offering the following research fellowships in the basic sciences related to arthritis:

1. Predoctoral fellowships ranging from $1,500 to $3,000 per annum, depending on the family responsibilities of the fellow, tenable for 1 year with prospect of renewal.
2. Postdoctoral fellowships ranging from $3,000 to $6,000 per annum, depending on family responsibilities, tenable for 1 year with prospect of renewal.
3. Senior fellowships for experienced investigation will carry an award of $6,000 to $7,500 per annum and are tenable for 5 years.

The deadline for applications is November 1, 1953. Applications will be reviewed and awards made by February 15, 1954. For information and application forms address the Medical Director of the Arthritis and Rheumatism Foundation, 23 West 45th Street, New York 36, N. Y.

A new **Navy Medical Department correspondence course** entitled "Frigid Zone Medical and Dental Practice" is now available to officer and enlisted personnel, both regular and reserve, of the Navy Medical Department.

The correspondence course is designed to provide officers and enlisted personnel of the Medical Department with knowledge necessary to care for the sick and injured under conditions of extreme cold. It contains up-to-date information on the latest developments in the field of cold weather medicine.

Regular and reserve, active and inactive, Medical Department personnel may apply for this course. For enrollment in the course applicants should apply by using NAVPERS Form 992. The form should be completed and forwarded via official channels to the Correspondence Training Division, U. S. Naval Medical Center, Bethesda 14, Maryland.

The Clinical Research Center at Bethesda, Md., the Public Health Service's new 64-million-dollar structure, was formally dedicated, July 2, by Oveta Culp Hobby, Secretary of Health, Education and Welfare. Dr. W. H. Sebrell opened the dedication ceremonies with a brief speech. He introduced Dr. Leonard A. Scheele, Surgeon General of the PHS, who in turn introduced Mrs. Hobby.

In explaining the operation of the new Center, Dr. Sebrell, Director of the National Institutes of Health, stated that research will be directed on seven medical fronts, cancer, heart disease, mental illness, arthritis, epilepsy, rheumatic fever, and dental diseases. Five hundred beds, which occupy only one third of the space, will be used for patients; the remaining two thirds comprise the research and service facilities. Dr. John W. Trautman is Director of the Center.

Immediately following the dedication, which was held in the Clinical Center auditorium, 600 invited guests, including interested scientists and Governmental officials, were conducted on an inspection tour of the research facilities. Open house for the general public was held from 1:30 to 9 p.m.

The first patients, 18 in number, were admitted to the new Center on July 6. They were candidates for treatment and study of three major disease groups, cancer, heart disease and arthritis. Some 200 to 250 patients are expected to be under study by the end of the current fiscal year, June 30, 1954.

At an organizational meeting of the **Health Section of United Community Services,** June 26, Dr. J. Ross Veal was elected Chairman. Dr. Veal is former President of the Federation of Citizens' Associations and Chairman of the Public Health Committee of the Washington Board of Trade. Mrs. John H. Ferguson, a member of the Executive Committee of the Health Section for the last two years, was named Vice Chairman.

A number of Washington physicians, most of them members of the District Medical Society, will take an active part in this Section during the coming year. Dr. Wallace M. Yater, Past President of the Society, and Dr. Paul B. Cornely, Medical Director of Freedmen's Hospital, are new members of the Executive Committee. Reëlected to the Executive Committee were Drs. E. H. Cushing, William L. Granatir, and Alice M. Waterhouse. Health Director Daniel L. Seckinger is an *ex officio* member of the Committee.

Dr. Josephine J. Buchanan, Chief of the Department of Rehabilitation and Physical Medicine, Gallinger Municipal Hospital, and Dr. Howard M. Payne, Chief of the Tuberculosis Division of Freedmen's Hospital, will serve with others as delegates from the Section to the Board of Trustees of UCS.

Public-at-large members of the Section include the names of Dr. Charlotte P. Donlan, Director of the Cancer Detection Clinic of George Washington University, Dr. William R. Marchant, and Dr. Frederick D. Mott.

Among those who will continue to serve on the Nominating Committee are Dr. Payne and Theodore Wiprud, Secretary of the Medical Society.

The Trudeau School of Tuberculosis, held at Trudeau Sanatorium and Saranac Lake, New York, ended its 4-week course on June 27. Forty-five physicians, the largest number to attend the course in its 39-year history, came from 11 states and 12 foreign countries. The faculty was composed of physicians and scientists from the Saranac Lake area and guest lecturers from out of town. Among the latter were Dr. Robert J. Anderson, Chief of the Division of Chronic Disease and Tuberculosis, Public Health Service, and Dr. James J. Feffer, Associate in Medicine, George Washington University School of Medicine.

Trudeau School is intended for graduates in medi-

Calendar of Meetings, June 16–July 15, 1953

June 16	Grievance Committee
	Washington Heart Association
June 18	Committee on Cancer Control
June 19	Subcommittee on Alcoholism
	Washington Psychoanalytic Society
June 22	Executive Board
	Board of Censors
June 23	Committee on Public Health Exhibits, Annual Scientific Assembly
June 25	Committee on Scientific Exhibits, A.S.A.
June 29	Finance Committee, A.S.A.
June 30	Program Committee, A.S.A.
July 3	Board of Censors
July 6	Subcommittee to Review Claims for Liability Insurance
July 7	Executive Committee, D. C. Survey of Medical Care of Indigents
July 13	Executive Committee, D. C. Survey of Medical Care of Indigents
July 14	Executive Committee, D. C. Survey of Medical Care of Indigents
	Medical Officers' Reserve Units

cine who wish to prepare themselves for sanatorium or public health service and for physicians who desire a postgraduate course in tuberculosis and other diseases of the lungs.

The Executive Committee of the **Middle Atlantic States Regional Conference** has voted to disband the organization because of lack of interest. Representing the District of Columbia on the Executive Committee was **Dr. William P. Herbst.**

Dr. John Minor, retiring Chairman of the **Executive Board of the Medical Society of the District of Columbia,** was host to Board members at the Metropolitan Club, June 22. Following dinner the Board held its regular business meeting.

The Secretary reported that he had been elected Secretary-Treasurer of the Conference of Presidents and Other Officers of State Medical Societies at the annual meeting of that organization in New York immediately preceding the AMA sessions.

Approval was given to discontinuing the Committee on Teaching Technics and the Committee on Care of the Indigent, the duties of the former having been taken over by the Program Committee and the latter by the Committee on Medical Care.

At the request of Mr. "Bus" Ham, of the *Washington Post*, the Board endorsed the National Celebrities Tournament to be held at the Woodmont Country Club, September 3–6. The proceeds of this tournament will be expended for the purpose of reducing juvenile delinquency.

Providence Hospital Medical Alumni Association held its annual outing and banquet, June 16, at the Kenwood Country Club. Dinner at the Clubhouse followed an afternoon of golf. Dr. James P. Lyons, President of the Association, presided during the dinner program when three members of the Association were honored: Dr. Thomas S. Lee, Chief of the Cardiac Clinic at Providence; Dr. William F. O'Donnell, pediatrician; and Dr. Edward A. Cafritz, surgeon. Dr. Lee, who has served Providence since 1903, received a special gift; Drs. O'Donnell and Cafritz, who have served Providence for more than thirty years each, were presented plaques and made honorary members of the Association.

Guests of honor at the dinner were the Most Reverend Patrick A. O'Boyle, Archbishop of Washington, and the Most Reverend John M. McNamara, Auxiliary Bishop of Washington. Other guests included Senator Frank Barrett of Wyoming, Representatives John McCormack of Massachusetts and James Patterson of Connecticut; Dr. Wallace M. Yater and Theodore Wiprud, President and Secretary, respectively, of the District Medical Society.

George Washington University School of Medicine has just received a check of $27,387.50, which is the first part of a five-year grant of $125,187.75 from the National Foundation for Infantile Paralysis. The grant will enable the School of Medicine to teach the basic concepts and technics of total medical rehabilitation to undergraduate and graduate students. Under the supervision of Dr. Walter A. Bloedorn, Dean of the School of Medicine, the program will be administered by a committee composed of all the clinical departments. A coördinator of rehabilitation, to be named, will implement the program.

George Washington University has also received two grants, totaling $10,250, from Eli Lilly Company of Indianapolis, for medical research into the value and effectiveness of certain vaccines and drugs used in combating infant and childhood diseases. One grant, in the amount of $4,250, will be used for studying the immunity to whooping cough which is developed in infants by the use of new vaccines. This study will be carried out under the direction of Dr. John P. McGovern, who is Assistant Professor of Pediatrics.

The $6,000 grant will make possible a study of the value of erythromycin, a recently developed antibiotic drug, in treating infant and childhood diseases. This work will be carried out under the direction of Dr. McGovern, Dr. Josephine Kety, and Dr. Leroy Hoeck, medical officers in pediatrics at Gallinger Municipal Hospital.

PHYSICIANS HONORED BY WASHINGTON HEART ASSOCIATION

At the Annual Meeting of the Washington Heart Association, June 16, Dr. Clayton B. Ethridge (left), reëlected President for a second term, congratulates the three physicians, all Past Presidents, who received the "Hercules Heart" awards. They are (left to right): Dr. J. Ross Veal, Dr. Frank S. Horvath, and Dr. Bernard J. Walsh.

Georgetown University School of Medicine has received a new grant of $8,000 from Chas. Pfizer & Co., Inc. for a study of the newer antibiotics, the research to be conducted under the direction of Dr. Sol Katz, Clinical Adjunct Professor of Medicine.

At the **Annual Meeting of the Washington Heart Association** in the Medical Society's Library, June 16, eleven Hercules Hearts were presented for the first time to 10 individuals and 1 organization for outstanding service to the Heart Association. Recipients were: Dr. Frank S. Horvath, President of the Association, 1948–49; Dr. J. Ross Veal, President, 1949–50; Dr. Bernard J. Walsh, President, 1950–52; Mr. McLain B. Smith, Campaign Chairman for 2 successive years; Mrs. Robert E. Moran, founder of the Women's Board; Major General Lewis B. Hershey, National Chairman of the Federal Employees Committee for the 1953 Heart Fund; Mr. Paul McDonald, Heart Fund coördinator for the Treasury Department; Mr. W. Elliott Nefflen, Chairman of the Department of Defense for the Heart Fund; Mr. Frank Bentley, Heart Fund Chairman for Veterans Administration; Mr. Gerald Ryan, Heart Fund Chairman for the Commerce Department; and the Junior League, Mrs. Earl McFarland, Jr., Chairman. The League for many years has maintained a club and magazine for cardiac children. Mr. Oscar H. West, Chairman of the Awards Committee, presented the figurines, stating that the Hercules Heart symbolizes "the great heart of the winner of the award as well as the great heart of the shield protecting the faceless figure, humanity, from heart disease."

Dr. Clayton B. Ethridge, President, and Mr. Robert Ramspeck, Vice President, of the Association were reëlected to office. Dr. Hugh H. Hussey was elected Secretary and Mr. Kenneth Birgfeld, Treasurer. Dr. James Watt, Director of the National Heart Institute, is a new member of the Board of Directors. Among those reëlected to the Board for another term were Drs. Hussey, Hill Carter, Edgar W. Davis, and Frank S. Horvath.

Dr. M. A. Blankenhorn, Professor of Medicine of the University of Cincinnati School of Medicine and Director of the Department of Medicine of Cincinnati (Ohio) General Hospital, served as Professor of Medicine *pro tem* at Georgetown University School of Medicine for the week, May 11–16. Dr. Blankenhorn acted as director of the educational activities of the Department of Medicine at the Hospital and School of Medicine in place of Dr. Harold Jeghers, Professor of Medicine and Physician-in-Chief of the hospital. Most of the program during the week was devoted to informal ward rounds and small group teaching with attendance limited to the senior medical students and the house staff. However, a few sessions were open to the medical profession. These included a combined Medical-Surgical Conference on the Georgetown University Medical Division of Gallinger Municipal Hospital, and Medical Grand Rounds and a Clinical-Pathological Conference at the Georgetown Medical Center.

The Washington Psychoanalytic Society elected the following officers at its business meeting, June 19:

Dr. Ernest E. Hadley, *President*; Dr. Douglas Noble, *Vice President*; Dr. Stanley L. Olinick, *Secretary-Treasurer*.

Dr. Robert A. Cohen was named to represent the Society on the Executive Council of the American Psychoanalytic Association, and Dr. Rex E. Buxton was named alternate representative.

Drs. Worth B. Daniels, Thomas S. Sappington and John W. Trenis were among 17 civilian physicians recently selected as senior civilian consultants to the Surgeon General of the Army, Major General George E. Armstrong. The consultants are chosen with the assistance of the Society of U. S. Medical Consultants, subject to the approval of General Armstrong. Each one must have outstanding abilities as a teacher, be certified by the specialty board in his field, and, preferably, have had some military service as a medical officer. Most of the senior consultants have already served for several years as advisors on difficult clinical and graduate training problems, according to General Armstrong.

All three Washington physicians have been appointed to serve in the field of medicine. Dr. Daniels (Internal Medicine) is Clinical Professor of Medicine at Georgetown University School of Medicine; Dr. Sappington (Gastroenterology) and Dr. Trenis (Tuberculosis) are Associates in Medicine of George Washington University School of Medicine.

Dr. Russell M. Wilder, Director of the PHS National Institute of Arthritis and Metabolic Diseases, resigned his position on July 1 because of ill health. Dr. and Mrs. Wilder will return to their home in Rochester, Minn.

Dr. Wilder is an internationally known nutritionist and authority on diabetes. He became the Institute's first director shortly after its creation by Congress in 1950. For 20 years Dr. Wilder was a member of the Council on Foods of the American Medical Association. From 1919 to 1950 he was on the staff of the Mayo Foundation and Clinic at Rochester, Minn., where he became Chief of the Department of Medicine.

Dr. Benedict Nagler became Chief of the Neurology Section of the Psychiatry and Neurology Division of the Department of Medicine and Surgery, **Veterans Administration Central Office,** on July 19. He succeeded Dr. Tiffany Lawyer, Jr., who is leaving VA to accept a full-time position on the staff of Georgetown University School of Medicine. Dr. Lawyer has served Georgetown as Assistant Professor of Neurology since September 1952.

Dr. Nagler has served as Associate Professor of Neuropsychiatry at the Medical College of Virginia and Chief of the Neuropsychiatric Service at the VA Hospital in Richmond, Virginia. In his new position he will coördinate policies in the treatment of more than 10,000 veteran patients suffering from neurologic diseases in VA hospitals and outpatient clinics. He will serve under Dr. Harvey J. Tompkins, Chief of the Psychiatry and Neurology Division.

Dr. Nagler is a native of Austria and received his medical degree from the University of Hamburg, Germany, in 1923. He entered military service in August, 1943 as Assistant Chief of the NP Section at Cushing Army General Hospital in Framingham, Mass. and served until 1946. He has been certified by the American Board of Psychiatry and Neurology in both psychiatry and neurology.

Dr. Carlton N. Price, Clinical Assistant Professor of Obstetrics and Gynecology, Georgetown University School of Medicine, was lecturing in Ogden, Utah and Denver, Colorado, May 20 to 29. He gave three lectures before the Ogden Surgical Society and one lecture each before the Utah and Denver Obstetrical and Gynecological Societies. He also conducted two seminars before the Ogden Surgical Society. Dr. Price's lectures concerned the following subjects: "Control of Hemorrhage in Pelvic Surgery," "Stress Incontinence in Women," and "Office Diagnosis and Office Procedure for Gynecological Patients."

Dr. Ralph G. Beachley, Director of Public Health in Arlington, was formally commissioned Honorary Colonel of Charleston, South Carolina, at the May meeting of the Charleston Chamber of Commerce. This is an honor granted to individuals who at some time have contributed to the development of the state of South Carolina.

Dr. Beachley, early in his career in Public Health work, spent a number of years in South Carolina when he was associated with the Rockefeller Foundation and the State Board of Health in the eradication of hookworm on a state-wide basis. Later Dr. Beachley organized the first full-time Health Department in several sections of the state and was in many ways a pioneer in preventive medicine and public health in South Carolina. He was Secretary of the South Carolina Public Health Association and later President of that organization. For three years he was Associate Editor of the *Journal of the South Carolina Medical Association.*

Dr. Beachley, a native of Maryland, has been engaged in Public Health work in Virginia since 1936 and has been Director of Public Health in Arlington since 1938. He is also Adjunct Professor of Public Health Practice at George Washington University School of Medicine.

Drs. Brian B. Blades and Frank W. Konzelmann will be guest speakers at the **103rd Annual Session of the Medical Society of the State of Pennsylvania,** which will be held at the Hotel William Penn in Pittsburgh, September 22–25. Dr. Blades will present a paper the second morning of the session on "Diagnosis and Criteria of Operability of Bronchogenic Carcinoma." Dr. Konzelmann will read a paper, September 24, on "Selection and Interpretation of Liver Function Tests."

Dr. Frank D. Costenbader gave a series of 10 lectures as part of a basic course in orthoptics at the University of Iowa School of Medicine, June 15–August 15. The course was one for student technicians and was sponsored jointly by the American Orthoptics Council and the University of Iowa.

Dr. Edgar W. Davis was reëlected Governor of the American College of Chest Physicians for the District of Columbia at the 19th Annual Meeting of the College, held at the Hotel New Yorker in New York, May 28–31. Registration at this meeting, approximately 1,500, surpassed all previous College records for attendance at both the scientific sessions and social functions.

In recognition of services he has extended to the Dominican Republic, **Dr. Jonathan M. Williams** was recently elected an honorary member of the Medical Society of the Dominican Republic. At a buffet supper at the Embassy, June 29, Dr. Luis de Thomen, the Ambassador to the United States from the Dominican Republic, presented Dr. Williams with a certificate of membership.

Dr. John Hugh Lyons has been elected to serve as a Vice President of the George Washington Alumni Association. Mr. Stanley J. Tracy, Assistant Director of the Federal Bureau of Investigation, succeeds Dean Louis Kayser as President of the organization.

Dr. Charles E. McEnerney has been elected Chairman of the Board of Directors of the Arthritis and Rheumatism Foundation of the District of Columbia. Mr. Richard A. Norris, President of the Lincoln National Bank, is the new President of the Foundation. The elections were held at a meeting of the Board of Directors at the Army-Navy Country Club, July 14. Mr. Norris has served as Treasurer of the Foundation for the past three years and was one of its founders.

Dr. and Mrs. Samuel M. Dodek are in Europe this summer and will attend the sessions of the Seventh International Congress for the History of Science in Jerusalem this month. Dr. Dodek will present a paper at this meeting on "The Development of Methods for Human Tocography during the Past Century."

The American Academy of Pediatrics has announced the following electees to membership in its organization: Drs. John E. Cassidy, Leroy E. Hoeck, Fernando R. Leyva, Reginald S. Lourie, Ruth E. Standard and Marshall C. Sanford.

Rear Admiral Leslie O. Stone assumed command of the **National Naval Medical Center** in Bethesda, Md., on June 30, upon the retirement of Rear Admiral Bertram Groesbeck, Jr., MC, USN. Admiral Groesbeck was placed on the retired list of officers of the Navy on July 1, 1953, following more than 35 years of continuous active Naval service. He assumed command of the National Naval Medical Center in April, 1952. In civil life Admiral Groesbeck will be Director of the Department of Public Health of the state of Indiana with headquarters in Indianapolis.

Admiral Stone was Medical Officer in Command of the U. S. Naval Hospital in Bethesda from 1946 until 1948. Early in 1952 he was named Assistant Chief of the Bureau of Medicine and Surgery for Personnel and Professional Operations, which post he relinquished for his new assignment.

Admiral Stone is a native of Kittrell, North Carolina, and a graduate of the University of North Carolina and Jefferson Medical College. He entered the Navy in 1920.

Brigadier General Sam F. Seeley, Chief of Surgery at **Walter Reed Army Medical Center,** has been assigned to the Office of the Chief Surgeon at the headquarters of the U. S. Army in Europe. General Seeley has been Chief of the Surgical Service at Walter Reed and Director of the Surgery Division in the Center's Army Medical Service Graduate School since July 1949.

Dr. Robert W. Baker, a Life member of the Medical Society of the District of Columbia, celebrated his 90th birthday anniversary, July 5, in Baltimore with his sons and their families. Dr. Baker was born in Winchester, Virginia, July 5, 1863. He received his medical degree from the University of Virginia in 1887 and began his practice in the District of Columbia in 1891. The Editorial Board of the MEDICAL ANNALS joins with Dr. Baker's colleagues and friends in warm congratulatory wishes.

Dr. Maurice H. Herzmark will attend the International Arthritis Congress in Geneva, Switzerland, August 24, and the Seventh General Assembly of the World Medical Association at The Hague, Netherlands, September 4. Prior to these meetings he will tour France and Italy.

The Washington Heart Association awarded its first clinical fellowship in cardiology to Dr. James J. Leonard, native Washingtonian and a graduate of Georgetown University School of Medicine (1949). Dr. Leonard will train with Dr. W. Proctor Harvey in clinical cardiology; Dr. Joseph Barker in electrocardiography; Dr. George Schreiner in kidney problems associated with the heart; and with Dr. Charles A. Hufnagel and Dr. Harvey in clinical investigative work at the Georgetown Medical Center.

Dr. Raymond J. Winfield has terminated his practice in Washington and moved to Marlette, Michigan.

BOOK REVIEWS

An Atlas of Surgical Exposures of the Extremities. SAM W. BANKS, M.D., Associate Professor of Orthopaedic Surgery, Northwestern University Medical School; Attending Orthopaedic Surgeon, Chicago Memorial Hospital and Woodlawn Hospital; AND HAROLD LAUFMAN, M.D., PH.D., Associate Professor of Surgery and Director of Experimental Surgery, Northwestern University Medical School; Associate Attending Surgeon, Michael Reese Hospital. Price, $15.00. Pp. 391, with 552 illustrations and 179 plates. Philadelphia: Saunders, 1953.

Here is a fine atlas of surgical exposures which fulfills a long-felt need. This atlas is well recommended to all who are training in surgery or orthopedics, as well as to those surgeons who venture only occasionally into an extremity and have need to review the anatomy in question.

The contents are well arranged and indexed. For each exposure given, the indications and step-by-step procedure are outlined on one page while the illustrations for each step are on the page facing the descriptive text. This avoids the annoying necessity of reading the descriptive text on one page and then thumbing several pages away for the illustration.

The black and white illustrations are good. They are simple and yet they are not of the diagrammatic type.

Proper names are avoided throughout and the various incisions are designated by an anatomic description.

DONALD H. MILLARD, M.D.

Children of Divorce. J. LOUISE DESPERT, M.D. Price, $3.50. Pp. 282. Garden City, N. Y.: Doubleday, 1953.

About 1 out of every 3 marriages in the United States ends in divorce. Last year 350,000 couples made the trip to the divorce courts. This figure, staggering as it is, gives only a small inkling of the human suffering involved for the participants and their children.

Dr. Despert has written a wonderfully compassionate book about this perplexing subject. She is well prepared for her task by her many years of work as a child psychiatrist. The former head of the Children's Service of the New York State Psychiatric Institute, she spent 10 years in research on the personality development of young children at the Payne Whitney Nursery School. Her orientation is clinical and psychiatric in the best sense of both words.

Dr. Despert's main thesis is that divorce need not be disaster. She observes, with ample clinical evidence, that "emotional divorce" always precedes legal divorce, sometimes by many, many years. It is this "emotional divorce" that wreaks such havoc with both parents and children. With scientific thoroughness the author exposes the hollow mockery of those marriages which only stay together "for the good of the children." Dr. Despert is more interested in salvaging intact human beings than she is in saving bankrupt marriages.

Not that she doesn't advise trying if there is any reasonable chance of creating or re-creating a harmonious relationship in the family. And she discusses fully all the methods, the agencies, and the resources to which the harassed family may turn for help. She also discusses in gratifying detail just how to manage the emotional problems that children face when divorce is contemplated, when it is in process, and after it has been accomplished. She recognizes full well that divorce, even though necessary, does not settle anything by itself. It is often necessary for one or both parents to have extensive psychiatric treatment to prevent the same pattern from repeating itself again and again.

Many young people confront psychiatrists at their first consultation with the statement, "My parents were divorced when I was young and I don't want the same thing to happen to me." Oversimplified as this may be, it is to this problem that Dr. Despert directs much of her attention. She shows that children of "broken homes" need not end up as delinquents, 4-F's, or social misfits. It is not divorce per se which makes for delinquency, etc., but rather the emotional distortions of the family constellation. With rare understanding and engaging simplicity Dr. Despert directs our gaze to the real cause for the illness and not to the pseudo cause.

Physicians in their role of family friend and counselor are frequently consulted in the early stages of marital discord. This book should find a hearty welcome among all members of the medical fraternity. It fills a long-felt need, a need not met by any other book known to this reviewer. Jurists, lawyers, clergymen, and marriage counselors will also find this book of great value. Despite its title, this book can be safely recommended as an excellent guide for all parents who are interested in understanding their relationships with their children—and not only for the 350,000 couples who are already in trouble.

ZIGMOND M. LEBENSOHN, M.D.

Physical Examination of the Surgical Patient. J. ENGLEBERT DUNPHY, M.D., F.A.C.S., Associate Clinical Professor of Surgery, Harvard Medical School; Surgeon, Peter Bent Brigham Hospital; Consultant in Surgery, Children's Medical Center; AND THOMAS W. BOTSFORD, M.D., F.A.C.S., Clinical Associate in Surgery, Harvard Medical School; Senior Associate in Surgery, Peter Bent Brigham Hospital; Associate in Surgery, Children's Medical Center. Price, $7.50. Pp. 326, with 188 figures. Philadelphia: Saunders, 1953.

The first part of this book deals with the elective physical examination of the surgical patient, with especial reference to procedures and conditions not usually emphasized in the standard textbooks of surgery. The book covers most surgical conditions exclusive of those involving the eyes, ears, nose, heart and lungs.

The book reëmphasizes many of the "lost arts" of thorough physical examination, and has many useful illustrations of pathologic conditions and technics of examination. Especially valuable are the chapters on "Examination of the Head and Neck," "Examination of the Abdomen," and "Special Examinations of the Peripheral Blood Vessels."

The second part of the book pertains to "The Emergency Examination" of the surgical patient. This part is concise and compact and covers the examination of the acutely injured patient very well.

This book can be highly recommended in the teaching of medical students and house staff members, and it should be a welcome addition to the library of every active physician and surgeon.

W. LEONARD WEYL, M.D.

The Ciba Collection of Medical Illustrations. Vol. I. Nervous System. A Compilation of Pathological and Anatomical Paintings, prepared by FRANK H. NETTER, M.D. With a foreword by John F. Fulton, M.D., Sterling Professor of the History of Medicine, Yale University School of Medicine. Price, $6.00. Pp. 143, with 104 full color plates. Summit, New Jersey: Ciba Pharmaceutical Products, Inc., 1953.

I think that all of us who receive the little booklet entitled *CIBA Symposia* have seen this book emerging in a fragmentary form. These illustrations, as originally prepared by Frank Netter, M.D., for the *Symposia* are now collected into one large, well bound and excellent book. The subject matter is divided into 5 separate sections dealing with the anatomy of the spine, the anatomy of the central nervous system, functional neuroanatomy (it is really neurophysiology), the autonomic nervous system, and finally a section on the pathology of the brain and spinal cord.

The illustrations themselves are masterpieces of clarity, for Dr. Netter has the happy faculty of being able to blend the schematic with the strictly pictorial, and thus achieves an accurate and memorable effect. The plates are all in color, which naturally enhances their value and their comprehension. Each plate is accompanied by 2 or 3 paragraphs of explanatory text written by recognized authorities in their respective fields. These texts are gems of lucidity and brevity and largely avoid the dull pedantry which makes up the bulk of most anatomical writings. A surprisingly complete subject index accompanies this volume. This collection will undoubtedly become a most prized morsel in the diet of medical students and residents. The Ciba Pharmaceutical Company deserves unstinted praise for its interest and support which have made such a volume possible.

J. M. W.

Encyclopedia of Aberrations: A Psychiatric Handbook. Edited by EDWARD PODOLSKY, M.D., State University of New York Medical College; with a foreword by Alexandria Adler, M.D., New York University College of Medicine. Price, $10.00. Pp. 550. New York: Philosophical Library, 1953.

This is a comprehensive psychiatric encyclopedia. The aberrations are listed alphabetically. The coverage varies from simple definitions of psychopathologic terms (whose meanings are easily understood) to elaborate discussions (including original articles) whenever the concept is not easily defined or illustrated.

The discussion of chronic alcoholism alone covers 24 pages.

It will be an interesting volume for the general physician, and a valuable addition to the psychiatrist's library.

NICHOLAS J. COTSONAS, JR., M.D.

JEROME A. SANSOUCY, B.A., M.D.
(1906–1953)

Dr. Jerome A. Sansoucy, Washington ophthalmologist, died, June 25, 1953, at his home, 3900 13th Street, N.E., after a long illness. He had offices at 2017 Massachusetts Avenue, N. W.

Dr. Sansoucy was born in Auburn, Maine, November 24, 1906. He received his arts degree from the University of Maine in 1931 and his degree in medicine from Georgetown University in 1936. Dr. Sansoucy interned at Providence Hospital the following year. Preparing to devote himself to the field of ophthalmology, he served as resident physician at Episcopal Eye, Ear and Throat Hospital in 1937–38 and again in 1942–43, continuing on the staff as junior surgeon. He practiced his specialty in Lewiston, Maine from 1938 until he returned to Episcopal Hospital for further training in 1942.

Dr. Sansoucy became an Active member of the Medical Society of the District of Columbia in 1944. He was a member of the American Medical Association, Past President of the Washington Ophthalmological Society, and a member of the Georgetown Clinical Society.

Surviving are his wife, Mrs. Sheila Doody Sansoucy; two young daughters, Genevieve and Mary; his mother, Mrs. Joseph N. Sansoucy, of Lewiston, Maine; three brothers, Armand, Romeo and Robert Sansoucy, and two sisters, Miss Lolita Sansoucy and Mrs. Roland Boutin, all of Lewiston.

DAVID LANDER MAXWELL, Phar.D.
(1892–1953)

Mr. David L. Maxwell, pharmacist and friend of the medical profession of Washington for many years, died, June 19, 1953, in Doctors Hospital after an extended illness which began in 1944. Mr. Maxwell was associated with Mr. Irving A. Tennyson in the firm of Maxwell & Tennyson, a partnership which began in 1926.

Mr. Maxwell was born in Kingston, Tennessee, January 28, 1892. He and Mr. Tennyson met in the 1900's when they were clerks at different drugstores.

In 1910 both decided to enter George Washington University School of Pharmacy and they received their degrees in pharmacy in 1913. When the Washington Medical Building at 1801 Eye Street, N.W., was being erected, they decided to join as partners in a pharmaceutical firm which would specialize in compounding prescriptions and sale of hospital and doctors' office supplies. The firm now operates three stores in the Medical Center area.

As a Kiwanian, Mr. Maxwell was devoted to welfare work with crippled children. He was a member of the American Pharmaceutical Association, the District of Columbia Pharmaceutical Association, and had been an Associate member of the District Medical Society since 1931. He also belonged to the Columbia Country Club and the University Club. He was a Director of the Lincoln National Bank and the Jefferson Federal Savings & Loan Association.

Besides his wife, Mrs. Lena S. Maxwell, he is survived by a son, Dallas S. Maxwell, both residing at 8804 Ridge Road, Bethesda, Md.; a sister, Mrs. Ellen McGonagle, 516 East Nelson Avenue, Alexandria, Va.; and a brother, Richard B. Maxwell, Harrisburg, Pa.

Industry and Medicine—McGee

(Continued from page 395)

The individual worker, industrial management, insurance companies, benevolent societies and other essential elements of our national structure have legitimate claims on medical science and opinion.[5]

An industrial health program must be economically sound by yielding tangible as well as intangible benefits to the company and to its personnel. The elements of the program must be understood and heartily accepted by the men and women for whom it is devised. It must be based on sound medical practice and directed toward the specific needs of the plant. It should emphasize the aspects of preventive medicine which give the greatest returns without unnecessary duplication of existing medical services of the whole community.

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Lipoid Pneumonia—Guin and Winship

(Continued from page 400)

examination contributed little in the way of suggesting a diagnosis. Varied X-ray appearances were present in this group. Fat stains of sputum proved helpful in establishing a diagnosis. Intra-alveolar oil provokes an alteration in the alveolar lining cells and a massive interalveolar fibrosis. The result of this process is the formation of a barrier to the exchange of respiratory gases. Differential diagnosis is often difficult, since lipoid pneumonia may mimic many other pulmonary disorders. Treatment rests solely on prevention. In the light of evidence at hand the use of mineral oil as a laxative and oily nose drops is to be condemned.

T. Winship, M.D.
Garfield Memorial Hospital
Washington 1, D. C.

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Anxiety—Laughlin

(*Continued from page 411*)

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Hemorrhagic Diatheses—Rheingold

(*Continued from page 413*)

anticoagulants) are simply done. Several of these are somewhat newer, and some explanation may be of help. (Detailed account of these tests may be found in a recent manual by Dr. T. H. Ham.[2])

Plasma recalcification time. In this test, blood is drawn and mixed with potassium oxalate. The plasma is then removed and calcium chloride added. The end point of complete coagulation is then noted. Normal is from 90 to 120 seconds. It is prolonged in platelet deficiency and deficiency disorders such as hemophilia, and increased in circulating anticoagulant.

Prothrombin consumption time. In this test, one measures the prothrombin time of serum in order to learn how much prothrombin was used up in the clotting process. This test is abnormal, that is, diminished amount of prothrombin is used up in the clotting process and therefore is present in the serum, as in thrombocytopenia, hemophilia, and parahemophilia.

Fibrinolysin test. Whole blood is allowed to clot and is then placed in a water bath at 37.5 °C. If enough fibrinolysin is present to completely lyse the clot in 16 hours, this fact is of clinical significance. If fibrinolysin is present in large quantity the clot will disappear very quickly.

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Doctor's Investments—Wiprud

(*Continued from page 433*)

transactions; however, if they are to be of value, the records must be complete. They do not need to be complex; in fact, it is desirable that they be as simple as your situation permits. Such records can be limited to merely the recording of cash income and expenditures to be acceptable to the Department of Internal Revenue.

My point about financial records as they apply to investments is that they are essential if the doctor is to know what he has to invest and the exact status of his estate. I might mention, too, that unnecessary financial losses have often occurred because of poor financial records.

Some physicians seemingly wish to avoid making a will for a variety of reasons. I recall one of the ablest physicians I have ever known where investments are concerned died a year or so ago without leaving a will. It was a shock to his friends who had admired his business sagacity.

Even the individual with the most modest estate should make arrangements for the disposal of his property upon his death and should, of course, seek the advice of a capable attorney.

Heading the other essential insurance which a physician should carry is malpractice; others are fire, workmen's compensation, automobile, and public liability. These should, obviously, be in adequate amount, otherwise the physician's future may be placed in jeopardy. I have been astonished by the inadequate coverage carried by many physicians as protection against malpractice suits. We made a survey at one time for our Blue Shield Plan and discovered that there were some 50 physicians in Washington who have no coverage at all.

In summing up what I have said, I think the most important points which I have made are these: (1) The average physician-investor should seek adequate protection for himself and his family; and (2) he should make certain of the safety of his investments. The safety factor cannot be overemphasized in a day of unsettled economic conditions. In this way he can be assured that his planning for and against the future will not have been in vain.

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GASTRIC DECOMPENSATION

WILLIAM TRAVIS GIBB, JR., M.D.

Assistant Clinical Professor of Medicine, George Washington University School of Medicine

THERE are certain aspects of prolonged gastric retention associated with chronic duodenal ulcer that are not clearly explainable by the usually accepted concepts of the mechanism involved. This retention may vary from a slight staining of barium in the stomach at the end of 5 hours to a tremendous dilatation of that organ with no radiographic evidence of motility discernible. It is usually assumed under these circumstances that the lumen of the pylorus is variably occluded, either by actual scarring and contraction, by edema associated with an antral gastritis or duodenitis, spasm, or combinations of all three. The fact that this retention can be relieved in most cases by bed rest, antispasmodics, diet and repeated gastric lavage leads to the conclusion that edema was, in large part, responsible for the condition, and that this sort of treatment reduced its degree or actually alleviated it. Whether or not the individual's retention was relieved in this way usually influenced the future management of his ulcer, since, if his gastric emptying time became normal, he was continued on medical treatment; if not, surgery was indicated. Some patients who were treated medically in this way apparently remained cured, but in most cases the condition recurred at a later date and it was eventually necessary to resort to surgery.

Over a period of many years I have examined with the flexible gastroscope the stomachs of many individuals suffering from varying degrees of gastric retention, and, except for some with rather easily diagnosed malignant lesions, I have yet to see a single pylorus that by this method of examination was actually stenosed or occluded, or an antrum that was the seat of an edematous process of a degree sufficient to produce actual occlusion. In some few instances there seemed to be some evidence of a scar as shown by a mild degree of irregularity of the pyloric orifice. As a rule the pylorus was symmetrical and apparently of normal size. This on the whole does not correspond with the findings at operation, but even then the pylorus is usually patent. It must be kept in mind that dead resected tissue varies a great deal functionally from that which is alive.

Except for a few extremely severe cases, as a rule the patient with gastric retention manages to maintain a fair degree of nutrition, indicating that food does get into the intestinal tract in considerable quantities. The 5- and 24-hour films of an upper gastrointestinal X-ray examination will show considerable barium progressing along in the usual fashion, even in an apparently severe case. It has been difficult to explain why such a simple expedient as lavaging the stomach twice daily will frequently produce a dramatic reëstablishment of normal gastric emptying in a relatively short time, and why this improvement will often persist for a long time if the patient adheres to some sort of dietary regulation.

With these thoughts in mind a somewhat different concept of the pathophysiologic mechanism is presented. First of all, however, a rather radical idea of the normal functioning of the stomach and duodenum is suggested.

Normal Emptying Mechanism of the Stomach

The stomach is an extremely complex and dynamically integrated organ. A brief glance at any good anatomic illustration showing the arrangement of muscle layers and nerve plexuses in its wall will easily substantiate this observation. It is by no means merely a flaccid bag for the retention of ingested food. Gravity plays little or no role in its function, since the stomach empties with equal ease whether the individual be horizontal or vertical, or even when his head is lower than his feet, as when shock blocks are placed under the foot of his bed.

The musculature of the walls of the stomach is in a constant state of tonus which varies depending upon the amount of material within it and the degree of tension exerted by the autonomic nervous system. This tonus is not of equal degree in all parts of the stomach at all times. For instance, when a barium meal flows through the cardia during the first few swallows, it is not unusual for it to remain in the fundus for an appreciable length of time before the tonus of the body of the stomach relaxes sufficiently to allow it to drop to the most dependent portion of the greater curvature. This indicates that at least at that particular time the tonus of the empty stomach is different in the fundus than it is in the body.

It is a fact observable by means of the gastroscope that there is a definite structure known as the musculus sphincter antri which together with the angulus or incisura angularis seems to sharply divide the antrum from the body of the stomach. This curious structure is seen only in the living, functioning stomach, and has not been observed at necropsy except under most unusual circumstances. The musculus sphincter antri is semiannular in shape, is at right angles to the long axis of the greater curvature, and extends about half way up both the anterior and posterior walls. It seems to be a ridge composed of circular muscle fibers and presents a ropelike appearance because the rugal folds pass over it obliquely. The angulus, another term used by gastroscopists, coincides with the incisura angularis of the radiologist or anatomist but differs to the extent that in the air-inflated stomach it appears to be a sharp-edged curtain or ridge at right angles to the lesser curvature. Under certain circumstances, particularly before much air has been introduced into the stomach, the gastroscopist frequently sees the musculus sphincter antri in a contracted state, the net effect being to actually divide the stomach in half at this point. This seems to be about the only place in the stomach where such an annular constriction or spasm occurs. Because it has been so consistent it has seemed to me that it represents a purposeful mechanism rather than a nonspecific irritative phenomenon.

No one will question the fact that the really deep, purposeful peristaltic waves of the stomach are confined exclusively to the antrum. This can readily be observed both radiologically and by means of the gastroscope. These waves start at the musculus sphincter antri, are circular in shape, progress distally at a rather slow rate of about once every 20 seconds, and converge on, and blend with the pylorus. Another extremely important fact that is constantly observed by means of the gastroscope is that the pyloric orifice remains open at all times except when a wave of peristalsis reaches it. It then closes momentarily in a sphincter-like manner and then reopens. At the time of firmest closure a slight reflux of loose mucosa is observed.

When the fluoroscopist first observes the barium-filled stomach under the usually prescribed conditions, he will see wave after wave of deep peristalsis progressing down the antrum but nothing going into the duodenum. After a time barium will suddenly seem to shoot through the pylorus into the duodenum and into the upper jejunum as though it were under considderable pressure. Sometimes just before this happens the antrum will seem to take on a ball-like appearance and will apparently be separate from the body of the stomach.

If these scattered observations represent facts, how then can they be fitted into a concept of gastric emptying in which a regularly repetitious course of events takes place in the antrum and only occasionally with stomach contents being ejected into the duodenum? The usually accepted idea, that the pylorus remains closed almost all of the time and that after antral peristalsis has churned and mixed that portion of the stomach contents to a certain consistency the pylorus opens and ejects this material into the duodenum, does not seem to fit in with these facts. The time-honored analogy of the filled but not segmented sausage casing, in which the demonstrator partly compresses one end of the tightly filled tube with his fingers and then slowly moves this point of compression toward the other end, thereby moving sausage meat ahead of his fingers, does not fit these facts and gives a false impression of the action of peristalsis. The demonstration will work with a semi-solid medium such as sausage meat, but if the tube's contents were liquid the situation would be much different. The investigator under these circumstances would have to compress the walls of the tube completely oı would have to move his fingers forward at a very rapid rate. Whereas the walls of the stomach exhibit a very definite state of tonus, they are by no means rigid or unyielding. The pressure exerted upon its liquid contents by the slowly moving waves of peristalsis would be dissipated in all directions and have little or no effect directly at the pyloric orifice.

Systole Theory

It is perfectly well in keeping with the observable facts that the following succession of events takes place. The body of the stomach acts as a reservoir for ingested food. The shallow, weak waves of peristalsis in this area merely act to gently agitate the periphery of this liquid mass and to change slightly the relative positions of the mucosa and the gastric contents, thereby facilitating the mixing and perfusion of the secretions. No pressure changes are brought about in this way.

The antrum performs the function of rendering successive portions of the heterogeneous contents of the body of the stomach into a homogeneous liquid mass suitable for digestion in the small bowel. Even though the pylorus remains open about 90 per cent of the time, practically nothing passes through it because this kneading and mixing action does not raise the hydrostatic pressure within the stomach's lumen.

When the material thus prepared in the antrum is ready for the intestine, or when the duodenum is ready to receive it, the first thing that happens is a contraction of the musculus sphincter antri which effectively divides the stomach into 2 separate portions. The antrum, then, to all intents and purposes becomes a small, closed chamber, and the tonus of its walls increases to a point that resists distention. This of itself raises the intraluminal pressure. A contraction wave starting at the musculus sphincter antri further increases this intraluminal pressure, and at the same time exerts a milking action which forces stomach contents through the pylorus. At the end of systole, or rather when the contraction wave reaches the pylorus and merges with it, the pylorus closes, thereby preventing a reflux of duodenal contents which would naturally be under greater hydrostatic pressure than the antrum when it relaxes.

Another structure entering into the picture is the duodenal cap. This portion of the duodenum differs from other parts inasmuch as it is more distensible. Could it not be that it acts as a pressure regulator for the contents of the duodenum? In the early phases of gastric emptying the duodenum and the upper jejunum are empty and able to accommodate considerable amounts of gastric contents. However, as the emptying of the stomach progresses, this section of the upper bowel becomes relatively full and not able to contain easily the amount of material the stomach would like to eject into it. Inasmuch as the pressure under which this material is ejected seems to be relatively high, without some sort of a regulator it would exert undue pressure on the walls of the relatively full duodenum. The cap under these circumstances distends, thereby lowering the intraduodenal pressure and to a large extent preventing reflux into the stomach when the pylorus opens. An analogy might be found in the first part of the aorta which performs a similar service by dampening the increase in pressure during the systole. The 8 line drawings show the mechanism graphically.

Following the events depicted in the line drawings no further emptying of the stomach occurs until the contents of the first and second portions of the duodenum have been moved along to the third portion. This is accomplished, in all probability, by a negative pressure caused by the jejunal contents being moved in a caudal direction by peristaltic action. The tonus of the walls of the first and second portions of the duodenum probably has increased, making the lumen relatively smaller. When this portion of the duodenum is ready to receive fresh antral contents, this increased tonus decreases. Functional disturbances of this particular part of the mechanism, that is, some interference with this lessening of tonus prior to the emptying cycle, may account for the so-called duodenitis syndromes. A simple partial obstruction of the upper jejunum without any irritative or inflammatory component would not disturb this sequence of events unless it was practically complete. The so-called mesenteric artery syndrome can produce a great dilatation of the duodenum without interfering with gastric emptying. However, if an irritative element is added, the gradient of tonus in the duodenum is increased, and the degree of lessening of tonus in the first and second portions of the duodenum would not be as great. To fill this portion of the bowel would then require greater pressure from within the antrum to overcome the effects of this relatively greater tonus, or would require a longer period of time for the stomach to empty because a less amount of material could be ejected at each cycle, or it would require more frequent emptying cycles.

It would be difficult to postulate the complete mechanism which instigates each successive emptying cycle. The cycles are not regularly repetitious; that is, one does not take place with each fifth or tenth peristaltic wave. They come at irregular intervals. It seems reasonable to assume, however, that this irregularity has something to do with the receptivity of the first and second portions of the duodenum and is associated with the above-mentioned lessening of tonus.

The change from acidity of the gastric contents to alkalinity of the duodenal contents must take an appreciable length of time, since the secretions of the pancreas, liver and intestinal mucosa must be mixed with the freshly ejected stomach contents. This neutralization must take place by perfusion rather than by active mixing, since there is little effective peristalsis in the duodenum. It may be that, when thorough neutralization has finally taken place, the lessening of tonus occurs and that this is the signal for the stomach to go through another ejaculatory cycle.

Pyloric Obstruction

What happens when the duodenal cap becomes the seat of repeated ulcerations? More and more scar tissue forms and gradually the cap loses its normal elasticity. The intraduodenal pressure regulatory mechanism fails as a result, and, when the pylorus opens after systole, an abnormal amount of reflux occurs. Therefore, it may be said that the pyloric valve becomes relatively insufficient. The usual amount of stomach contents passes through it at each cycle, but then an abnormal amount regurgitates. In addition, the lumen of the very first portion of the duodenum is reduced because of scar tissue. Greater force is required to get the usual amount of material through it in the usual length of time. The same situation may be said to exist as in a stenosed and incompetent heart valve. Similar to the heart, the stomach has to work harder in order to keep up with its full work load. Unlike the heart, however, the stomach has no capacity to hypertrophy in order to assist it in remaining competent.

If at this point the work load of the stomach is decreased, as, for example, when the patient goes on a voluntary or prescribed diet which reduces the quantity and changes the character and consistency of the food he eats, the stomach may be able to maintain its compensation and empty in the prescribed length of time. However, if the pathologic process in the duodenum progresses slowly, the emptying time of the stomach increases to the point that it is not completely empty when food from the next meal enters. Dilatation then begins, since the metabolic needs of the body still demand as much food. With dilatation comes loss of tone and, with loss of tone, an incompetence of the antrum-body division brought about by the action of the musculus sphincter antri. This is a gradual process, so that the antrum continues to eject some of its contents effectively, but the majority remains in the stomach. A vicious cycle ensues: dilatation and incompetence, then more dilatation and more incompetence.

The results of treatment depend upon the stage at which it is instigated. If the loss of tonus is not great, lessening the amount of ingested food relieves to a certain extent the amount of retained material and allows for increased tonus and a return of competence. If, however, dilatation has been great, this simple form of treatment does not help a great deal. Why, then, does gastric lavage twice daily or intermittent suction help the situation? The answer is simple—this form of therapy merely removes the retained gastric contents and allows for a return of muscular tone and competence of the emptying mechanism.

In other words, the clinical picture of pyloric stenosis is not due to actual closure of the pylorus, but rather to a relative incompetence of its valve action. Because the competence of the mechanism can be restored by such simple means as repeated gastric lavage does not mean that the underlying pathologic condition causing the situation has in any way been changed. This concept of the involved mechanism may explain why pyloroplasty does not always work as well as might be expected.

Why then does a gastroenterostomy or a subtotal resection restore the normal emptying time of the stomach? One other observed fact may shed some light on this question. During the course of a gastroscopic examination of a normally functioning stomach, a few bulbsful of air will sufficiently inflate that organ, and this air will remain in the stomach almost indefinitely unless it is belched up. On the other hand, in the case of a stomach which has been resected, or when merely a stoma connects it with the jejunum, it is necessary to pump in a great deal of air before enough remains in the stomach to permit of suitable examination. Apparently there is some difference between the intact duodenum and the jejunum, the former having some mechanism which does not allow the air to pass into it through the open pylorus, and the latter permitting an almost indefinite amount of air to make its way into it. Perhaps it is this difference in receptibility between the intact duodenum and the artificially stomatized jejunum which permits the resected stomach to empty by means of a combination of gravity, pressure from the surrounding viscera and abdominal wall, and a very slight increase in intra-

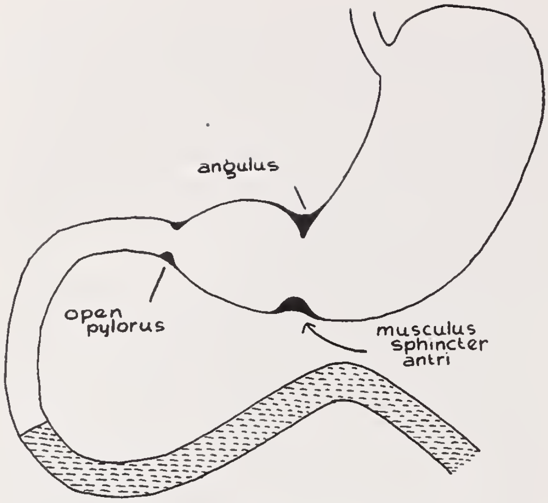

FIG. 1-A. The stomach is in a resting phase just prior to an ejection cycle. The material ejected during the previous cycle is indicated as being in or near the third portion of the duodenum. The first and second portions are relatively empty and in a receptive state.

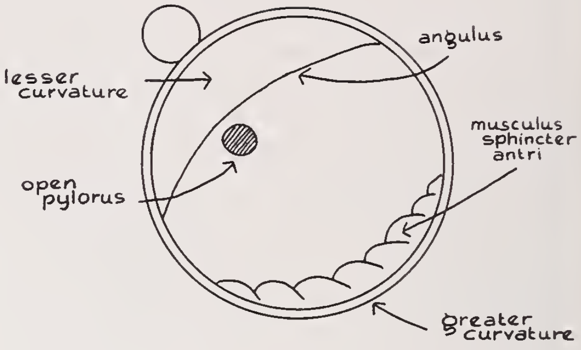

FIG. 1-B. Gastroscopic view of the antrum looking caudad, indicating the position of the musculus sphincter antri, the angulus, and the open pylorus in the background. This is the so-called 11:00 o'clock view at depth 1.

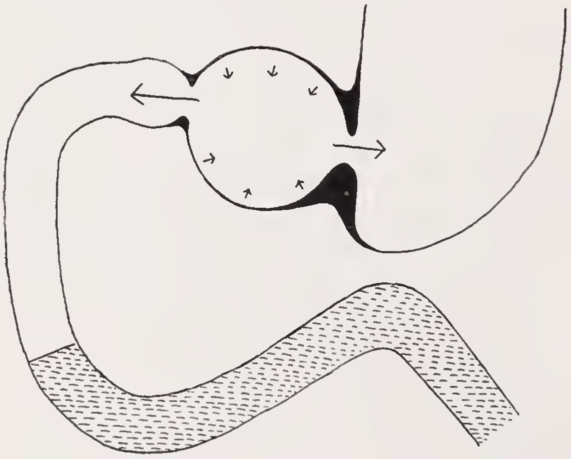

FIG. 2. The musculus sphincter antri is in the process of contracting. The tonus of the antral walls have increased considerably, thereby applying uniform pressure on its liquid contents which have begun moving through the pylorus. There is also a slight momentary reflux into the body of the stomach.

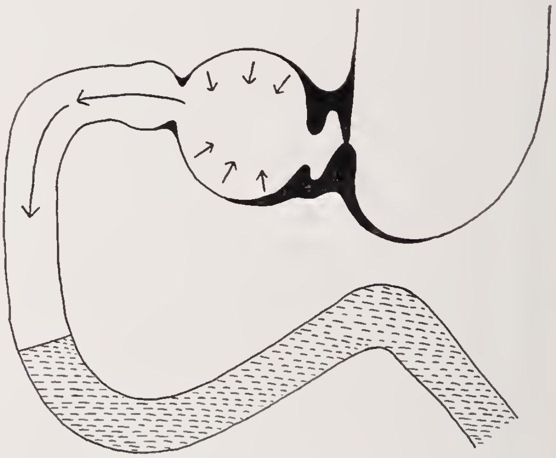

FIG. 3. The musculus sphincter antri is in a completely contracted state, effectively dividing the antrum from the body of the stomach. A wave of peristalsis is starting. The tonus of the antral walls has further increased and is exerting pressure on the antral contents, forcing the first part of this material through the pylorus into the first portion of the duodenum.

gastric pressure from increased tonus and weak peristalsis. Inasmuch as the size of a resected stomach is relatively very small and its tonus good, relatively slight peristaltic action produces a suitable increase in pressure.

Why some gastroenterostomies function well and others work poorly has always been an interesting question. A successful gastroenterostomy usually in time encourages normal emptying of the stomach through the pylorus.

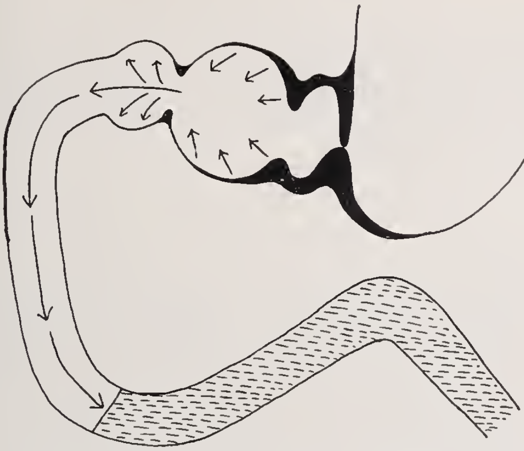

FIG. 4. The wave of peristalsis is progressing. The antral contents under positive pressure have reached the material in the third portion of the duodenum, and this relative obstruction further increases the pressure within the first and second portions of the duodenum. The previous contents start to move along. The cap is just beginning to distend, thereby taking up some of this increased intraduodenal pressure.

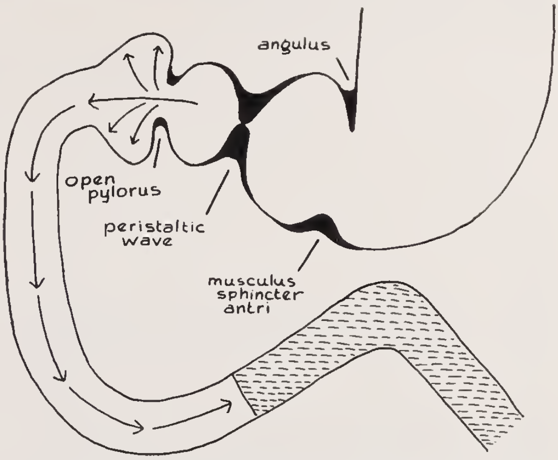

FIG. 5. The peristaltic wave has progressed still further and has obliterated the lumen of the antrum. The musculus sphincter antri has begun to relax. The contents of the duodenum have moved almost to the ligament of Treitz, and the cap is still further distended.

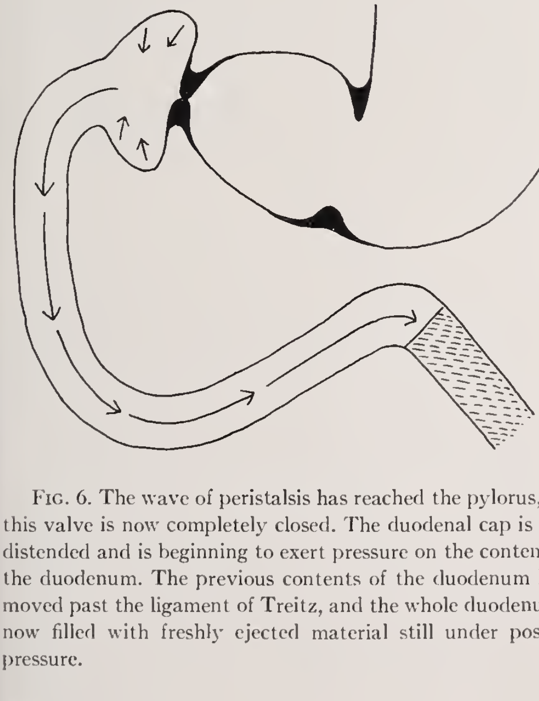

FIG. 6. The wave of peristalsis has reached the pylorus, and this valve is now completely closed. The duodenal cap is fully distended and is beginning to exert pressure on the contents of the duodenum. The previous contents of the duodenum have moved past the ligament of Treitz, and the whole duodenum is now filled with freshly ejected material still under positive pressure.

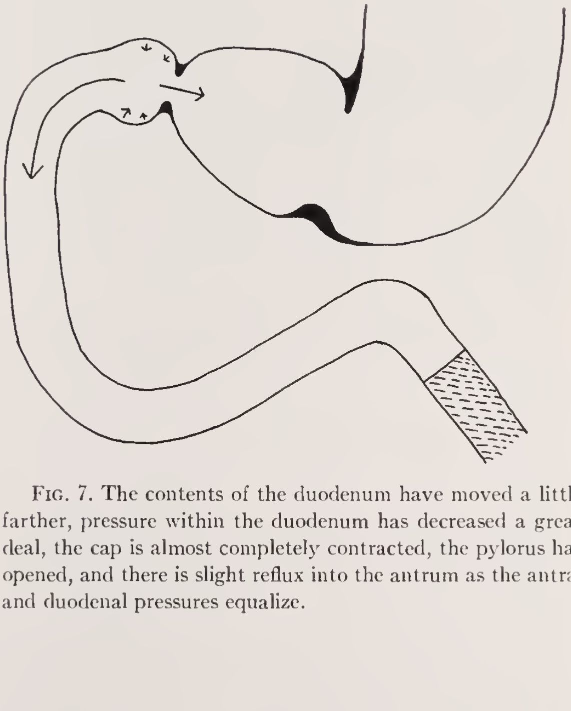

FIG. 7. The contents of the duodenum have moved a little farther, pressure within the duodenum has decreased a great deal, the cap is almost completely contracted, the pylorus has opened, and there is slight reflux into the antrum as the antral and duodenal pressures equalize.

A properly placed stoma probably should be proximal to the antrum, and may act merely as a permanent means of decompressing the dilated stomach, acting much in the same way as repeated lavage, and allowing for the return of normal tonus, thereby promoting the competence of the normal emptying mechanism. It

(*Continued on page 515*)

THE MANAGEMENT OF ESSENTIAL HYPERTENSION*

JOHN M. EVANS, M.D.

Associate Clinical Professor of Medicine. George Washington University School of Medicine

ESSENTIAL hypertension or hypertensive vascular disease has been managed in the past with a great host of therapies, largely empiric, and often of questionable value. Recently, more potent and definitely hypotensive agents have been introduced into our armamentarium. A major consideration in treatment is selecting the patient on whom to employ these agents and determining the time and circumstances for their introduction.

The obvious first step in deciding about treatment is establishing the presence of arterial hypertension. An acceptable abnormal level of blood pressure is 150 systolic over 90 diastolic when found consistently in serial, random determinations. It should be recognized that in most patients the blood pressure taken under the potentially threatening circumstances of the physician's office is almost invariably the highest pressure. If repeated examinations confirm arterial hypertension the next step is to exclude the hypertensive states that are curable.

Coarctation of the aorta is diagnosed by comparing arm and leg pulses and blood pressures. The rare pheochromocytoma is screened by the Regitine test, and the equally rare unilateral kidney disease requires pyelographic and other genitourinary investigation. Another hypertensive-like condition which should be rigorously excluded is that occurring in older atherosclerotic subjects, usually over 50, in whom the systolic pressure may be some 180 to 200 mm. Hg and the diastolic under 90. This condition, a product of atherosclerosis with loss of aortic elasticity, does not represent arteriolar vasoconstriction and requires no hypotensive therapy. If next we rule out the renal sources of high blood pressure, chiefly glomerulo- or pyelonephritis, we are left with idiopathic or essential hypertension.

The management of essential hypertension is best considered in the light of its natural history. Unfortunately, the number of carefully controlled, long-term studies of patients is insufficient to permit conclusive answers. Certain information, however, looms prominent. In planning treatment it is helpful to classify essential hypertension into 3 main groups: (1) mild benign, (2) intermediate benign, and (3) premalignant and malignant. The prominent factors in determining the patient's classification are the level of diastolic blood pressure, the degree of vascular disturbances in the heart, brain or kidney, and the presence of symptoms. Frequent serial observations are necessary.

Group I consists of patients, most often women, with mild to moderate diastolic elevation in the range of 90 to 115 mm. Hg. They are often over 50 years of age when the hypertension is discovered and are free of vascular lesions and cardiac or renal insufficiency. These patients tolerate quite acceptably this elevation. It is impressive in a follow-up study by O'Hare and Holden[1] of a selected series of mild benign hypertensives (table 1) that the period of documented hypertension ranged from 10 to 34 years, with an average of 17 years, and that 23 per cent of the patients had survived an average of 25 years with the majority still living. Generally speaking, these patients require nothing beyond expectant and general management.

The group III patients also can be dealt with directly. Here we find the patient, usually a man under 45, with persistent diastolic elevation of 130 mm. Hg and over and associated vascular lesions affecting the retina, heart, brain and kidney. There is prompt progression of both pressure levels and vascular lesions under observation. In this group the evidence is overwhelming for increased vascular complications and shortening of life. Palmer and associates[2] reported a mortality of 80 per cent in malignant hypertension after an average 4 years of follow-up. Fortunately, the incidence of this form of hypertension is slight, representing about 5 per cent of some 2,100 patients studied by Perera,[3] and probably constituting considerably less than 1 per cent of hypertensives seen in office practice. These are the individuals with the premalignant or the malignant form of the disease who need and need urgently the potent therapeutic agents or sympathectomy.

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* Presented at the Second Midwinter Seminar of the Medical Society of the District of Columbia, March 18, 1953.

TABLE 1

The Duration of Hypertension in a Selected Group of Mild Benign Essential Hypertensives[1]

PERIOD, YR.	NO. OF PATIENTS	NO. LIVING	NO. DEAD
30–34	4	3	1
25–30	8	5	3
20–25	11	8	3
15–20	42	31	11
10–15	35	24	11
Total..........	100	71	29

The major problem in determining the need for specific treatment involves group II patients, with intermediate benign hypertension, in whom blood pressure ranges between the above described extremes. This group is made up of patients of either sex who present diastolic pressures from 115 to 125 mm. Hg in the absence of pronounced retinal, cardiac or renal lesions. Serial study over 6 to 12 months shows no progression.

Again reliable statistics are not available, but there is reason to believe that some of these patients approach the full life expectancy without undue vascular morbidity.[3, 4] In the Hypertension Clinic, the George Washington University Hospital, there are several patients who have shown a diastolic pressure of 120 to 130 mm. Hg for periods of 15 to 20 years. I know personally the history of a physician who carried significant diastolic hypertension for some 41 years before suffering a myocardial infarction at 60 with death 2 years later from apoplexy. These no doubt are rare examples but point up the fact that certain individuals in this group are resistant to the crippling complications of hypertension.

It would appear then that patients in this group should be treated vigorously only when there is serially increasing elevation of the diastolic blood pressure or progression as manifest by advancing retinal, cardiac, electrocardiographic, or renal changes. It should be emphasized that greater experience and follow-up data with the newer hypotensive drugs may bring forth indications for earlier treatment of the group II subjects.

Since it is obvious that progression of the hypertensive vascular process is a large factor in planning treatment, base line studies are essential. They should include urinalyses for albuminuria and formed elements, the phenolsulfonphthalein dye excretion, the urine concentration test for renal function, and careful examination of the retinae for the state of the blood vessels and retinopathy. When practicable it is helpful to include an X-ray film to determine the size of the heart and left ventricle and an electrocardiogram to help appraise left ventricular function.

And now to the actual steps in treatment. The group I subjects require no specific therapy. Every effort should be made to deëmphasize the blood pressure in the patient's mind. Since psychogenic features are often prominent, they should be alleviated when possible. Living habits must be adjusted to provide ample rest bolstered by sedation with chloral hydrate or barbiturates as necessary. If practicable, vacations or periods away from work are to be arranged at intervals of 3 or 4 months. Obesity when present should be modified to the ideal weight. Strenuous or stressful loads of physical exertion are curtailed to moderate activity.

Treatment of group II patients includes the measures employed in group I, in addition to which one may add sodium restriction. It is generally agreed that severe, rigid curtailment of sodium intake is necessary to achieve results. If some 4 to 6 weeks of thorough salt deprivation are ineffective, one may abandon this approach. In patients carrying diastolic pressures of 120 to 125 mm. Hg, with headache, dizziness, fatigability or other symptoms, a course of treatment with Apresoline or Veratrum viride is practicable while the patient remains ambulatory. Unfortunately, with the Veratrum preparations the hypotensive dose is associated with uncomfortable side-effects in the great majority of patients.

The group III subject is best managed by a period of hospitalization when he is cautiously regulated on oral Veratrum, or parenteral hexamethonium (C6) in combination with 1-hydrazinophthalazine.[5, 6, 7] Figure 1 presents the clinical and laboratory data of a patient with malignant hypertension who responded well to the latter regimen.* The potent hypotensive action of C6 makes it mandatory that this agent be employed only under strict medical supervision. In view of variations in absorption, oral dosage with this agent is dangerous and is not recommended. After determination of the hypotensive dosage of C6 it is often possible to train the patient in self-administration for ambulatory management upon discharge from the hospital. A recent report by Wilkins and Judson[8] suggests a place for *Rauwolfia serpentina*, particularly in combination with Veratrum or 1-hydrazinophthalazine, in the premalignant group III hypertensive. Confirmation of these observations will be awaited with interest.

In the group III subject, when the properly applied potent hypotensive drugs have been ineffective, lumbodorsal sympathectomy is indicated. There is evidence that the operation will lower blood pressure and prolong life expectancy in some 10 per cent of patients with the severer forms of hypertension.[9] Bilateral adrenalectomy, alone or in combination with sympathectomy, is to be considered in the experimental phase at the present time.

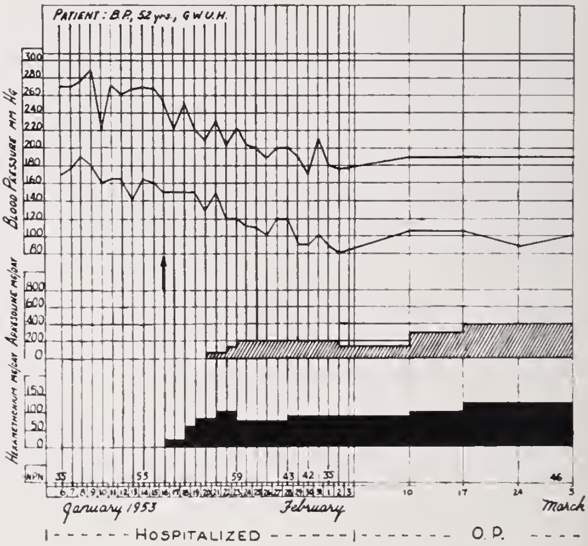

FIG. 1. The clinical and laboratory data in a patient with malignant hypertension treated with C6 and 1-hydrazinophthalazine.

SUMMARY

The provision of new and potent hypotensive drugs calls for establishing criteria for their use in patients. A therapeutic classification is provided based upon the natural history of essential hypertension. It is suggested that group I or mild benign hypertension does not require the newer agents. These should be employed in group II or intermediate benign hypertension with the appearance of progression in diastolic hypertension, vascular lesions, or symptoms. In the presence of premalignant or malignant hypertension, group III, therapy should be prompt and vigorous. If the medical agents, properly applied, are ineffective, lumbodorsal sympathectomy becomes the procedure of choice.

It is apparent that potent weapons have been

(*Continued on Page 515*)

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* This material is presented through the coöperation of Dr. Irene Tamagna, Director, The Hypertension Clinic, George Washington University Hospital.

X-RAY EXAMINATION OF THE GALLBLADDER*

WILLIAM W. STANBRO, M.D.

Professor of Radiology, George Washington University School of Medicine

GALLBLADDER disease is common and its symptomatology often indefinite. Accurate diagnosis is dependent upon X-ray evidence.

PLAIN FILMS

About 10 per cent of gallstones are sufficiently calcified to be visualized in the plain film of the abdomen. Gallstones are characteristically laminated or faceted and can be distinguished from kidney stones, which are usually evenly dense, and from mesenteric lymph nodes with flaky calcification. Occasionally kidney stones are faceted or laminated and not all gallstones possess this characteristic. The relationship of the calculus to the liver and kidney in erect and supine films may be helpful in distinguishing between atypical gallstones and kidney stones. The value of the lateral view is limited if the kidney is low in position (the inferior calyx below the inferior margin of the body of the second lumbar vertebra), since a calculus in its pelvis will then lie anterior to the ventral margins of the vertebral bodies. Calcifications in the pancreas, adrenal, liver and renal artery are less likely to be confused with gallstones. Rarely an undissolved pill in the gastrointestinal tract may simulate a gallstone, but radical change in its position on subsequent examination rules out a calculus.

The gallbladder may be visualized by virtue of calcium in its walls or milk of calcium bile in its lumen secondary to longstanding obstruction of the cystic duct. When containing milky calcium bile the gallbladder is visualized in the plain film exactly as if filled with a cholecystographic medium except for its unchanging contour and failure to empty.

In cases of internal biliary fistula gas may outline the gallbladder and/or bile ducts, making these structures visible in the plain film. If, in addition, distended gas-filled loops of small bowel are present, the diagnosis of gallstone ileus is a likely one.

Emphysema of the gallbladder, usually due to Bacillus welchii, allows visualization of the gallbladder by virtue of gas both within its lumen and in its walls.

VISUALIZATION OF THE GALLBLADDER

Technic:

1. Light supper of non-fatty foods at 6:00 p.m.
2. After supper swallow 6 tablets of Telepaque with water.
3. Eat nothing after evening meal. Water in moderate amounts.
4. Report to X-ray Department at 9:00 a.m. without breakfast.

Films taken:

1. Scout film of abdomen.
2. Spot films of gallbladder area in postero-anterior, oblique and lateral recumbent positions. Erect film in postero-anterior or oblique position. On occasion a lateral decubitus film.
3. Spot films of gallbladder area 1 hour after fatty meal.

Diagnosis: A good shadow is seldom obtained in the presence of gallbladder disease. However, a normal-appearing gallbladder shadow is occasionally visualized with small nonobstructing calculi in the cystic duct, which are overlooked because of failure of filling of the cystic duct with contrast material. The use of Telepaque as a cholecystographic medium instead of Priodax, which less frequently demonstrates the bile ducts, and roentgenoscopic pressure technics may serve to decrease this source of error in cholecystography by improved visualization of the cystic duct.

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* Presented in a postgraduate lecture course for physicians on the Practical Application of the Basic Sciences in Internal Medicine at George Washington University School of Medicine, December 4, 1952.

A poor shadow is uncertain evidence of disease if Priodax is used as the cholecystographic medium. With the use of Telepaque experience may prove a faint shadow to be of more diagnostic import.

An absence of the gallbladder shadow, barring an error in technic, is reliable evidence of biliary disease. Although absence of the shadow does occur in severe liver disease, obstruction of the common bile duct, and cholecystitis without stones, it is by far most frequently found with stones in the gallbladder or its duct.

A malformed shadow, as for example a "Phrygian cap," is by itself of little significance. Pathologic constrictions of the gallbladder are usually accompanied by additional evidence of gallbladder disease such as poor concentration of the contrast material or the presence of stones.

A persistent shadow is of no diagnostic importance. If the gallbladder fills it must be emptying.

Poor contraction of the gallbladder after a fatty meal is of common occurrence when Priodax is used as the cholecystographic medium, since the drug itself retards gallbladder emptying. With the use of Telepaque, contraction regularly occurs after the fatty meal with frequent visualization of the cystic and common bile ducts. Again, however, if the gallbladder fills, it must be emptying. The post-fat meal film has its chief value in the evasion of gas shadows and, with the use of Telepaque, in the demonstration of the cystic and common bile ducts.

Benign tumors of the gallbladder are usually polyps or papillomata and are demonstrated in the cholecystogram as radiolucent shadows peripherally placed with unchanging position in the prone and upright films.

Carcinoma of the gallbladder is almost always associated with stones and indicated in the cholecystogram only as nonvisualizable.

ARTIFICIAL INSEMINATION

ROLAND BIEREN, M.D., F.A.C.S.
Gynecologist, Group Health Association, Washington

ARTIFICIAL insemination with a donor's semen is often represented as a simple office procedure that works promptly. Although this is undoubtedly possible in an individual case, it may involve prolonged periods of treatment at considerable expense, with failure the ultimate result. Couples who contemplate such treatment should be forewarned of this. This report summarizes the experience of 8 couples with donor insemination over a period of 5 years. During this time I have treated and advised these people for their respective infertility problems. The actual inseminations were performed by other physicians.

Donor insemination is restricted to those who specifically request it. The physician who recommends such a measure should make certain that the marriage is stable and that the treatment is psychologically sound for the couple. Many physicians oppose donor insemination for psychologic reasons. In each of the 8 cases there appeared to be good psychologic indications for its use.

The average age of the wife at first visit was 28, of the husband, 31. The average duration of marriage was 5 years, with a minimum of 3 and a maximum of 7. There was strong psychologic pressure upon the wife to conceive in every case. One couple was unacceptable for adoption because of mixed religions. In 3 cases an adoption agency recommended that artificial insemination be tried before the couple would be seriously considered as candidates for adopting a child. In the remaining 4 the wives were under pressure from relatives. All 8 couples had one outstanding characteristic, a remarkably stable marriage. In each the wife was unquestionably the dominant partner. Every husband expressed the attitude that he wanted his wife to have a baby, any baby, just so it was healthy.

In couple no. 1 the husband was azoöspermic. There were no abnormalities in the wife. Basal temperature indicated regular ovulation except during 1 cycle of intensive treatment. Ovulation was confirmed once by endometrial biopsy. Repeated tubal insufflation found the tubes freely patent at all times. The wife was inseminated 3 days each cycle for a total of 10 cycles by physician "A" by means of the cervical spray method. She then changed to physician "B" who inseminated on 5 successive days each cycle with the cervical spray method. After 8 cycles she became pregnant. During the third month she had the spontaneous abortion of a well-formed fetus. After this she resumed with physician "B," who again inseminated for 5 successive days each cycle for another 10 cycles without success. She was then notified by an adoption agency that a child was ready. During her last period of treatment she became convinced that despite treatment for 5 consecutive days the time of ovulation was being missed and requested that for 1 cycle the insemination be performed daily for 10 consecutive days. This was done, and it is interesting that only during this 1 cycle of concentrated treatment did the basal temperature indicate that no ovulation had occurred.

In couple no. 2 the husband was azoöspermic. The wife showed no abnormalities. Basal temperature studies indicated regular ovulation. The tubes were patent on repeated insufflations. She was inseminated by physician "C" for 3 days of each cycle by means of intra-uterine injection technic. After the third cycle pregnancy occurred. A spontaneous abortion occurred during the third month with passage of a well-formed fetus. A year later she resumed treatments with physician "C" who used the same technic. She was treated for a total of 14 more cycles without success. She was then notified that an adoptive child was ready.

In couple no. 3 the husband was azoöspermic. There were no abnormalities in the wife. The first insemination performed by physician "D," who used the intra-uterine injection technic, was successful. She had a normal pregnancy. When the child was 18 months old she returned to physician "D" and again was successful with a normal pregnancy after the second treatment.

In couple no. 4 the husband was not quite completely azoöspermic. The semen specimen showed an occasional immotile sperm on repeated tests. The wife displayed no abnormalities. Basal temperature study indicated regular ovulation. This was confirmed by endometrial biopsy on 2 occasions. Tubal insufflation demonstrated freely patent tubes. She was treated by physician "E" for 3 days of each cycle by means of the intra-uterine injection technic. She conceived on the third cycle of treatment with a normal pregnancy. When the child was 2 years old she unexpectedly became pregnant by her husband while on a vacation. This pregnancy resulted in a spontaneous abortion during the third month. No identifiable fetus was found in the abortus. A few months later she went to physician "A" for resumption of treatment. He inseminated 3 days of each cycle for a total of 8 cycles with the cervical cap technic. The wife believed that this technic was faulty and went to physician "B," who agreed to use intra-uterine injection. This was performed for a total of 11 cycles without success.

In couple no. 5 the husband was azoöspermic. The wife was normal physically. Repeated insufflation found the tubes freely patent. Basal temperature study failed to show definite evidence of ovulation over a period of 4 years. Failure of ovulation was tentatively confirmed by endometrial biopsy on 3 occasions. Several courses of commercial gonadotropin failed to change the basal temperature pattern. Her menses were as regular as clockwork every 26 days and lasted 3 days. Despite the lack of evidence for ovulation she was given treatment by physician "A," who used the cervical spray technic for 3 days of each cycle for a total of 23 cycles. She then went to physician "B" for 5 cycles, the same technic being used. At this time I prescribed diethylstilbestrol, 0.1 mg. daily, for the first 14 days of each cycle. She returned to physician "A," who resumed treatments with the cervical cap technic. On the second cycle of insemination and the fourth month on stilbestrol she became pregnant. The pregnancy was normal. The patient herself believed the stilbestrol to be responsible, and when her child was 8 months old she resumed the drug. She then went to physician "C" to be inseminated again. This time the intra-uterine injection technic was used. During the third cycle of treatment and the fifth month on stilbestrol she became pregnant for the second time. This time she had a spontaneous abortion of a well-formed fetus during the third month. After she recovered she again resumed treatment, and after the first insemination and the third month on stilbestrol she became pregnant again.

Both husband and wife in couple no. 6 manifested no detectable abnormality. The sperm count was a high normal one. The wife ovulated regularly according to basal temperature. This was confirmed by endometrial biopsy on 2 occasions. Insufflation revealed normal tubal patency. Over a period of 5 years she had become pregnant twice, but both pregnancies ended in spontaneous abortion during the third month. A definite fetus was not seen in either abortus. After an adoption agency suggested donor insemination she went to physician "C," who performed intra-uterine insemination 3 times each cycle for 5 cycles, without success. She was then notified that it was possible to adopt a child.

In couple no. 7 the husband evidenced pro-

(*Continued on page 515*)

THE ANXIETY REACTIONS: THE ACUTE ANXIETY ATTACK OR PANIC, ANXIETY AND TENSION STATES, AND ANXIETY NEUROSIS*

An Outline of Data Relative to Their Identification and Management

HENRY P. LAUGHLIN, M.D.†

Assistant Clinical Professor of Psychiatry, George Washington University School of Medicine

THE modern era has been called variously the "age of science," the "age of inventions," and the "machine age." It might perhaps as appropriately be named the age of anxiety. It is not that anxiety was absent in men of past cultures. Indeed, anxiety has undoubtedly been a universal human experience since the beginnings of civilization, at which time it likely began its differentiation from fear—a process still perhaps not completed. Nor is it because of increased stresses and strains of present-day living. It is rather because of our present scientific recognition of its importance, the increasing focus of attention given by many professional people of varied orientation, and our clear recognition of its universality as part of human experience.

In previous ages this universality of experience was by no means recognized. We have also increasingly learned to appreciate the powerful force that anxiety plays in day-to-day living, in the shaping of personality, and even in the destiny of peoples and nations. With understanding of the important role of anxiety have come increased study and attention, which in turn have led to encouraging the development of knowledge about its nature and origins. It is still rather surprising, however, that it has remained for the present age to begin the systematic study of anxiety.[1]

What Is Anxiety?

Anxiety is an apprehensive tension or uneasiness. It is frequently described by patients as the anticipation of an unknown evil. In his presenting complaints a patient suffering from a typical anxiety state reported last week, "It's like I'm expecting something bad to happen, but, doctor, I don't know what it is!"

According to Freud's view, "anxiety is internalized fear, a signal for the ego that an unconscious repressed tendency is ready to emerge into consciousness and threaten the ego's integrity. The function of anxiety is the same as that of fear, which is a response to external danger, preparing the ego for meeting the emergency." The defenses mobilized (i.e., the mental mechanisms) and the response depend upon individual personality structure.[2]

When anxiety is present, the reaction of uneasy apprehension is out of proportion to the apparent or known stimulus.[3] In other words, the cause of anxiety is partly or entirely out-of-awareness. With this brief description, we shall pause to consider when anxiety may be considered pathologic and then proceed to the anxiety reactions per se. At this point I should like to refer interested readers who would like to know more of the nature and origins of anxiety to the preceding paper[1] of this series which is introductory to our present discussion.

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* This paper is the first of a series planned to cover the psychoneuroses. An introduction to the series appeared in the August issue of the MEDICAL ANNALS.

† In the private practice of psychiatry and psychoanalysis, Chevy Chase, Maryland; Consultant in Psychiatry, Walter Reed Army Medical Center and to Office of the Secretary, Department of Health, Education and Welfare; Research Consultant, U. S. Psychological Strategy Board.

PATHOLOGIC ANXIETY

The presence of anxiety may be conveniently considered as a matter of degree, varying in extent from person to person and from time to time. Another important variable factor is the relative ability of a given individual to tolerate anxiety. This includes both his degree of response and his method of expression in terms of physiologic, physical, and mental modes of expression (and effects!). One must also be aware of the outward and apparent expression of anxiety versus the covert and hidden. Finally, there is the relative ability to secure understanding and to reach a constructive compromise or solution of the precipitating event, which is most important.*

Considering these various factors, anxiety may be regarded as pathologic when present to such an extent as to interfere with (1) effectiveness in living, (2) achievement of desired goals or satisfaction, or (3) reasonable emotional comfort. Other yardsticks which might be used for measuring the destructive effects of anxiety are one's ability to develop and maintain healthy relationships with people and the subjective amount of "dis-ease" experienced by an individual. Alexander has noted the irrationality of "—anxiety without good reason—." In considering further when a person is regarded as ill, Alexander[4] says, "We consider (the patient) mentally sick also if he develops severe attacks of anxiety without any ideational content, which come to him apparently out of the blue without any apparent provocation, material or psychological."

Actually the patient himself may be in a better position to estimate the seriousness of impairment in living which he suffers from anxiety. Since anxiety is a highly subjective manifestation which is by no means necessarily outwardly apparent, trained observers may themselves have difficulty in accurately estimating its level. This may be true even after many hours of psychotherapeutic work with some patients. One cannot talk a patient out of his discomfort, nor can one secure mitigation by reassurance or by ridicule. Even though meant kindly, the patient may well resent such efforts.

Anxiety may vary from minimal to the overwhelming amount resulting in a panic. For the purposes of this study I shall include as anxiety reactions those emotional illnesses in which the most prominent presenting feature is anxiety.

THE ANXIETY ATTACK OR PANIC

The typical anxiety attack is an acute and subjectively dramatic incident which renders its victim temporarily incapacitated and thoroughly frightened.[5] Typically, it comes on suddenly and without warning. It is marked by extreme apprehension and fear or dread. There is often described a sense of impending doom or disaster. Usually there is palpitation. Various subjective sensations may be described, such as feelings that one will "burst," "fly apart," or "go to pieces." Perspiration may be profuse. Other physiological changes may be reported affecting any system. The attack may last from several minutes to several hours. It may take a day or more for the anxiety to recede to a fairly normal level. Occasionally the "tapering off" period is greatly prolonged, or the pre-panic level is never quite regained.

While panic and "acute anxiety attack" may be used interchangeably at times, a panic is technically the most severe form of anxiety in which anxiety literally overwhelms the person, who may feel as though he is disintegrating.†

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* See "Conflict" in Laughlin, H. P.: Anxiety, Its Nature and Origins.[1]

† At this point I wish to acknowledge my gratitude to Dr. Seymour J. Rosenberg for his review of this paper and helpful comments; and to Dr. Marshall deG. Ruffin, who collaborated in writing the corresponding chapter in "An Outline of Dynamic Psychiatry," upon which this discussion is largely based

The following are examples:

Case 1. A 24-year-old farmer reported at a University Clinic for a medical examination. He said that he felt "fairly good" at that time, but that yesterday he had a "spell" when he thought he was about to die. History disclosed that he was running his tractor when he suddenly became anxious, fearful, and started to tremble all over. His mouth became dry, his heart pounded rapidly, and he had a "sinking feeling" in his abdomen. He was extremely frightened and thought death was near. Unable to continue working, he was helped into the house where he was seen shortly thereafter by his family doctor, who referred him to the Clinic for diagnostic study.

Case 2. A 46-year-old business man was having serious difficulties with his boss and in his marital relations. One morning while driving to work he suffered a typical anxiety panic. In his words, "I was almost down to work. Close to the White House on Pennsylvania Avenue I got caught in some traffic. Suddenly I began to shake all over. I felt something awful was going to happen. I couldn't go on. I wanted to hide my face in my arms. I was afraid to drive, although I did manage to get my car to the side of the street and after a while got a policeman to call up a friend to come down.

"It was terrible. I keep dreading it might happen again. I've gotten afraid to drive downtown by myself now and feel I must have someone with me."

This is the kind of history one may hear in a typical acute anxiety panic attack. The physician is more apt to hear a descriptive after-the-fact account than he is to be an on-the-spot witness.

The anxiety attack is devastating to the patient. The dread and apprehension of another attack may in turn only increase the circumstances favoring its recurrence. It is important that the general physician should be able to differentiate this type of acute panic from other conditions which might be a more genuine threat to life (but hardly more subjectively uncomfortable!). If the examining physician can make a positive diagnosis of an acute anxiety attack and not label the illness as one which might constitute a threat to life, much needless suffering and expense can be prevented. Further, the chances of securing psychotherapy will be greatly increased.

The individual is not aware of the emotional basis for the attack. Indeed, he may vigorously deny the presence of emotional conflict or the presence of any stress or difficulty in his personal relations. Often the denial is more vigorous in the very area where the difficulty exists. The attempted denial is a defensive attempt to maintain repression as a seemingly more comfortable way of dealing with the conflict. Since the conflict is painful, it is not surprising to find patients who insist upon the presence of organic illness as being the villain responsible for their difficulty. This type of defensiveness is by no means limited to the acute anxiety attack. It may be seen in similar fashion with almost any type of emotional disorder.

Anxiety and Tension States

In the anxiety or tension state the anxiety may be regarded as having become subacute. The anxiety is not really different from that already described save in degree and chronicity. It is more steady and less intermittent. It may be low in intensity, but to some extent it is almost continuous. It is a reaction characterized by a nearly constant feeling of uneasiness and apprehension. The anxiety state may be differentiated from an anxiety neurosis in that it tends to be circumscribed as to time. Further, it is often more possible to determine some specific situational factors which have played a major precipitating role.

The patient may be able, at least superficially, to give a cause for his fears, or he may report an emotional reaction which seems to him out of proportion to the stimulus. The condition may vary from mild, continuous anxiety almost to panic. The real roots of pathologic anxiety lie in the unconscious; in turn, anxiety may be activated or "mobilized" by external circumstances or situations. Similarly, as we have observed in the acute anxiety attack, the anxiety may appear without apparent or obvious cause.

Anxiety tension states will also usually be accompanied by some overt physiologic hyper- or hypoactivity of the autonomic nervous system, and symptoms are expressed throughout the body. While psychophysiologic manifestations are almost inevitably witnessed in anxiety states, in general, anxiety itself is the major manifestation. The following case illustrates a chronic anxiety state in which the threat of derepression of hostility played a major role.

Case 3. A 32-year-old management trainee sought treatment because of extreme uneasiness when he came into close working relationships with people. He noted intermittent palpitation, occasional headache, and finger tremors. He described periods when his level of uneasiness and apprehension increased to interfere substantially with his efficiency and his work productivity.

This particular patient was an extremely courteous and almost subservient person who had a pathologic overconcern for agreement with the opinions of others. He had a great need to please. These traits had been used by him to a great advantage in his Government career, but at great cost to himself.

Much repressed hostility was present. This was a threat to him in close relationships with others and was illustrated repeatedly during the course of an analysis. As he gained insight into this segment of his difficulties, his tension became less and his headaches lessened. Over a period of many months of treatment, he learned to recognize aggressive and hostile impulses within himself and to deal with them more constructively.

It is generally true that neurotic patients experience covert or overt anxiety. In the beginning, anxiety may be intermittent or transient, but when the conflict responsible is not solved, it becomes chronic. Thus, the anxiety may truly become a state of emotional "disease." This is a state opposite to well-being and comfort. It is not surprising, therefore, that the individual tries hard to escape from anxiety. These attempted methods of escape become the neurotic symptoms which are observed, the more covert and devious constituting other types of neurotic reactions which will be considered later.

An illustration of how repeated situational stimuli, those arousing fear, apprehension and anxiety, may precipitate an anxiety state is seen in the soldier in combat.

Case 4. An 18-year-old seaman reported to sick bay on board a destroyer. He had served for several months of rather rigorous wartime sea duty marked by frequent calls to "general quarters." He noted that during the last several instances his heart had started pounding, a pounding that continued even when the all-clear was sounded. He was uneasy, worried, and had little appetite.

During the course of several subsequent months under continued stressful conditions, his pulse rate tended to remain high for increasingly longer periods after the combat situation was over. His other symptoms, including his subjective tension, gradually increased. Indeed, these symptoms now began to occur when no alarm was given. He began to complain of irritability, nervousness, and insomnia, and an early slight weight loss became more marked. His companions described him as "jumpy" and sensitive and reported that it was increasingly difficult to get along with him.

As the ship's tour of duty in the combat zone continued, it finally became necessary to evacuate him to the zone of the interior because of his level of tension and anxiety which had become continuous and which interfered with his effectiveness on a fighting ship.

This example also helps illustrate the varying reactions to stress that people display and their different degrees of tolerance. The same situation that will cause a marked emotional response in one person may leave another relatively unaffected. This is demonstrated in the above case where presumably everyone on board the ship had the same external and situational stimuli. Responses, however, varied markedly from person to person on board the ship, as did the individual tolerance to stress.

In summary, the anxiety state is that condition in which the presence of anxiety to a pathologic degree is on a more chronic and continuing basis than in the acute anxiety attack, although not sufficiently advanced to be regarded as an anxiety neurosis. The anxiety present is regarded as a more circumscribed manifestation. Often, situational factors playing a precipitating role are more easily identified. Since the determination of this diagnosis may be based to an extent upon the relative severity of the process, the physician must at times draw an arbitrary line.

ANXIETY NEUROSIS

DIAGNOSIS

For an emotional illness to be properly classified with the anxiety reactions the major presenting feature must be anxiety. Cases of neuroses often show manifestations usually associated with several types of neurosis. The result is a sometimes confusing overlapping of diagnostic categories. This is also true in anxiety neurosis. There are few cases of the latter in which some evidence of neurotic manifestations ordinarily classified elsewhere are not seen. On the other hand, there are no cases of neuroses in which anxiety is not present whether apparent, covert and hidden, or transmuted into a variety of neurotic defenses or somatic (psychophysiologic) manifestations.

We see, therefore, that a specific type of neurotic reaction seldom is seen in "pure culture." Mixed reactions are more usual. However, if criteria are used for diagnosis of the psychoneuroses in which classification is made according to the most prominent feature of the illness, more system and uniformity in diagnosis will result. Accordingly, when anxiety is the prominent presenting feature in emotional illness of neurotic level, the proper classification is under the anxiety reaction. When the anxiety is fixed and chronic and the psychopathologic process is well established, anxiety neurosis is the indicated diagnosis.

It is always helpful to encourage the patient's freedom in describing his difficulties. In most instances he will present data which make the diagnosis evident. In the following case, the account is a verbatim extract from a recent therapy session with a patient suffering from a firmly established and severe anxiety neurosis.

Case 5. "I feel tense and fearful much of the time. I don't know what it is; can't put my finger on it. I am frightened but don't know what I fear. I keep expecting something bad to happen. I just get all nervous inside. I don't want to get away from the house (home, refuge, safety). I fear I might go all to pieces, maybe become hysterical."

The patient continues to discuss this aspect a little further: ". . . I can go into a store (without feeling unduly anxious) if my car is parked by the store. Something might happen and I couldn't get back to my car. The farther I get from my car (or from home!) the more uneasy I get.*

"The house is like a refuge. The farther from it I get, the more uneasy I become. I feel secure in the house; if something happens, something can be done about it."†

INCIDENCE

We know that the extent of anxiety neurosis is wide, although the compilation of reliable statistics is a rather complex task. This is largely due to differences in terminology, definition, and usage, as well as to the practical difficulties of drawing an exact line to delimit the cases of pathologic anxiety which might be labeled as neurosis. Then also, the problems of case-finding in any systematic survey are indeed difficult. Suffice it to say that anxiety is by no means an uncommon or unfamiliar, albeit unpleasant, experience to most of us, and that an increase in severity to warrant a diagnosis of anxiety neurosis is frequent. Most psychiatrists would likely agree with Blau's recent comment that "there are unquestionably many more anxiety states than come to the attention of psychiatrists".[6] The same author also points out another commonly accepted point of view that "every person has his breaking point and with enough provocation will develop an anxiety neurosis."

PATHOGENESIS

Much of the data relative to the pathogenesis of anxiety was covered in the article on anxiety in the August issue of the *Annals*. Since most of this also applies to the pathogenesis and psychopathologic basis of anxiety neurosis, this section shall be limited to a few general thoughts.

As noted earlier, in anxiety neurosis the anxiety is more manifest and less concealed than in other neurotic reactions to be considered subsequently. Although psychophysiologic (psychosomatic) symptoms are not absent, anxiety is the most prominent single feature. Defense mechanisms in dealing with anxiety such as are seen in the conversion reactions, the phobias and the psychophysiologic states are either absent or overshadowed. In other words, in anxiety neurosis the anxiety of the conflict is less channeled into the more devious pathways of expression as seen in other types of neurosis. Anxiety is the prominent feature. Because of its overt expression, the anxiety in anxiety neurosis is often referred to as "free-floating anxiety".

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* The car becomes an extension of the house and a substitute. It is also a means of returning.

† I.e., "I will be taken care of." The unconscious roots of dependency reaching into early life are manifest here. Interestingly enough, the same security is derived from father's house—". . . with father's house it's the same."

Anxiety neurosis is sometimes referred to as "anxiety hysteria," under earlier nomenclature. This term, however, was more inclusive than the present one of anxiety neurosis. Many of the manifestations of anxiety neurosis are similar to those of fear and apprehension. We must therefore differentiate anxiety neurosis as a chronic psychopathologic condition from the more transient manifestations of fear which are normally experienced. In the neurotic situation the internal stimuli for fear are chronically present; and the anxiety is the outward and subjective manifestation of repressed conflicts or of threatened derepression.

SYMPTOMS

It is not possible to outline an invariable set of symptoms that one can expect. However, we can discuss the principal emotional and physical features as follows: Clinically, the anxiety may occur in waves or attacks. These may increase in frequency, duration, and severity, or they may become more or less continuous and chronic. Frequently patients use the word fear descriptively and do not use the term anxiety. During anxiety the patient may report that his subjective attitudes and the physiologic responses are like those associated with fear. These may include, for example, weakness, easy fatigability, palpitation, nausea, dyspnea, physical tension, anxiety, apprehension, and various other emotional feelings. Fear of death or of imagined, unknown but frightening events are not infrequent. These may be strong enough to produce panic or be overwhelming. The feelings reported are out of all proportion to any rational cause.

The subjective feelings are those which frequently parallel manifestations of fear. The physiologic response to fear is subject to wide individual variation. For instance, some persons respond to danger with palpitation and increased perspiration, while others complain of urgency or frequency; some have diarrhea, while with others the reverse, constipation, ensues. The patient may experience anxiety, worry, nervousness, irritability, depressed spirits, vague feelings of uneasiness, apprehension, or dread. He will frequently state that he feels or dreads that something terrible will happen but cannot say what it is. Patients with anxiety neurosis may, of course, have acute anxiety attacks as described earlier. The following cases are illustrative:

Case 6. A 31-year-old former Army sergeant was recently seen in consultation several months after rotation from a tour of combat duty in Korea and subsequent release from military service. He complained of irritability, tension, nervousness and trouble with sleeping. He was having difficulty in concentration at work and some marital problems. In describing how he felt he said: "There is something I am afraid of and I don't know what it is. It's a fear of something, but I can't name it."

The long course ("I've had this trouble for years . . .") with exacerbations identified the presence of chronic pathologic anxiety of sufficient degree and interference with living to warrant a diagnosis of anxiety neurosis.

Case 7. A 34-year-old housewife began treatment following a visit to her home in the midwest after several years of little contact. Anxious manifestations markedly increased when emotional ties and stresses believed inoperative became quickly activated. In her words, "I'm terribly tense and fearful. I've always been like this, but now it's much worse. I feel like something bad is about to happen. I don't know what it is, and I feel afraid."

In each of these cases the patient talks of fear. The term "anxiety" is not used. Past experiences of fear are most akin to what is felt currently and to what is familiar. The choice of the word "fear" is a logical consequence. Typically, in each case also there is the absence of a specific known cause.

The patient may also be chronically tense. He may be somewhat overconscientious, feeling that he must live up to a set of self-imposed standards (which are unrealistically high from the standpoint of an independent observer) which he is unable to meet. A certain amount of masochism—deriving satisfaction (unconsciously) from physical or psychologic pain or self-sacrifice[3]—is not infrequently present.

While physical features are apt to be less prominent than in other types of neuroses, some varied physical symptoms will likely be reported by most patients. Headaches are frequent; their origin is largely emotional. Headache may be characterized by (1) pressure-like pain in the occipital region or back of the neck, (2) the bandlike headache or "crown of thorns" around the head, (3) pressure on top of the head, or (4) pressure-pain in the forehead, temples and sometimes behind the eyes. Migraine headaches are frequent, with unilateral throbbing, pain, nausea, vomiting, scotomata, the desire to be in a dark, quiet room, and an allergic diathesis. These migrainous headaches which are precipitated by emotional tension and may even have an hereditary background of allergic disease.

Anxiety is commonly observed to be a destroyer of appetite. Over a period of time weight loss not infrequently results. As a consequence, the mental image most commonly held of the anxious person is that of a rather undernourished, thin, and worried-appearing individual. This also applies to the anxious child.

Less well recognized is the other side of the picture. A frequent approach to the attempted relief of anxiety is by eating. This is particularly true in the case of persons with considerable oral dependency. Eating is a means of securing comfort with roots stretching back into early infancy. These persist or recur out-of-awareness (unconsciously) into adult life. The strength of this need to eat is reflected in many cases of refractory obesity. The best conscious efforts of both physician and patient in dietary control and weight reduction may well come to frustration when pitted against this intangible, and often unrecognized, but most powerful opposition.

The patient during anxiety attacks may also report nausea, vomiting, and transient symptoms in various regions or systems of the body. Some impairment in sexual function may be noted. In general, fully satisfactory sexual relations are not possible for the person with anxiety neurosis. There is usually a correlation between the degree of psychopathology and the interference with ability to secure normal sexual gratification. Any of these features may be responsible for causing the patient to seek medical attention.

Case 8. A 42-year-old architect reported to an internist his "unsteady nerves" and "heart trouble" following a fairly minor automobile accident. He found himself dwelling on the possibly more disastrous results which might have ensued and was tense and restless and slept poorly. Accompanying his apprehension about a repetition was the reluctance to drive his car.

History revealed emotional and physiologic over-response to threatening situations in the past. The presence of chronic anxiety had interfered with his professional success and restricted his relationships with colleagues. Systemic review revealed coronal pressure headaches, weakness, palpitation, and increased perspiration, all accentuated since the recent disturbing experience. His cardiovascular system was negative. The internist's diagnosis of anxiety neurosis was confirmed by psychiatric consultation, and treatment was instituted which achieved considerable success.

CONSTRICTIVE EFFECTS OF ANXIETY

Anxiety is a highly uncomfortable subjective experience which we seek to ameliorate, avoid, or solve. It is not surprising that the attempts of some individuals to deal with their anxiety can result in an increasingly constrictive effect upon their living. Sometimes a vicious cycle is established. Let us see how this can happen.

For example, a person may experience an anxiety attack on a bus. Associating the acute discomfort with the bus, he may avoid buses as a way of preventing a repetition. If he continues a policy of avoidance, with subsequent anxiety, a progressive restriction on his activities will follow, as more and more places, experiences, or situations are avoided in an effort to escape his anxiety. This type of response with progressive constriction of living is not uncommon. The vicious cycle may begin when the avoidance of the situation (which it is feared will produce anxiety) in turn causes conflict. The following case illustrates this point.

Case 9. A 45-year-old business man suffering from a severe chronic anxiety neurosis avoided, among other things, small boats, crowds, arguments, and hospitals as the gradual constrictive result of a 6-year determined but futile campaign to avoid anxiety. His aged father was critically injured in an automobile accident and rushed to a local hospital. The patient, a most conscientious and filially loyal person, was under strong personal (and family) pressure to visit his injured father. His fear of an anxiety attack, associated in the past with hospitals, prevented him. The pressure of the resulting serious conflict, during 6 weeks of hospitalization, contributed in no small measure to raising the level of his already considerable amount of tension and anxiety.

TREATMENT

In view of the more direct expression of anxiety in the anxiety reactions (free-floating anxiety), one might suppose that their treatment would be reasonably easy. One might lend support to this view by contrasting these features with other types of neuroses in which the anxiety is much less direct, and is indeed often hidden and devious. However, such is not necessarily the case. As we shall see later in discussing other types of neuroses, anxiety seeks expression in increasingly devious emotional, physiologic, and somatic ways. In a discussion of recent causes of death among psychiatrists (leukemia, cancer, rare cerebrocardiovascular manifestations, etc.), Dr. Jarl Dyrud offered the interesting speculative etiologic hypothesis that the analysis of psychiatrists might result in driving residual anxiety underground into the most devious and hidden types of somatic expression. The direct expression of anxiety does not necessarily make it easier to gain more quickly or easily a thorough understanding of its pathogenesis. At times, it may even be more baffling and more frustrating to both patient and therapist. It is generally true, however, that anxiety reactions are among the emotional illnesses which are more responsive to therapy. Let us then proceed at this point to some general principles of management.

In the approach to the patient with anxiety neurosis the physician must use due caution and careful judgment in his evaluation of the facts at hand. While he must satisfy himself as to the absence of organic disease, it is important that he avoid focusing the patient's attention unnecessarily on physical symptoms. It is possible to make a positive diagnosis of emotional illness, not by exclusion alone. The development of skill and judgment in this area is important not only for the physician's own satisfaction, but also for the development of a feeling of security regarding the diagnosis of emotional illness.

It is of course more difficult for the less experienced practitioner to make a diagnosis in this fashion, because his own security and a lack of familiarity with emotional processes are involved. However, as the physician develops his ability and diagnostic acumen, he will find himself increasingly able to diagnose emotional states on positive grounds as opposed to diagnosis by exclusion of organic findings, as was the general practice several decades ago.

Since many emotionally sick patients are highly suggestible, it is possible that considerable harm may inadvertently result from attempts by the anxious, insecure or inexperienced doctor to treat these neurotic patients. In general, the patient is quick to sense uncertainty in the physician; to sense frustration, hesitation, or lack of knowledge and familiarity. The patient's response to these traits in the doctor is one in which his own level of anxiety is increased.

The doctor should not tell the patient of his own speculative diagnostic thinking or possibilities. When he does suspect physical disease, it may be much better to keep such suspicions to himself, at least until he has reached some definite conclusion. Emotional illness may be aggravated by injudicious frankness, premature expression of opinions, or undue attention to exhaustive examinations and laboratory studies.

Fortunately, in general the treatment of anxiety reactions has a favorable prognosis in skilled hands. Early adequate treatment favors the prognosis. Initiating treatment at an age when character structure is still more pliable and nonrigid is most helpful. Firm reassurance, when confined to statements about the absence of organic disease, is indicated. Otherwise, reassurance may be harmful or ineffective.

When acceptable to the patient and where available, the treatment of choice is intensive psychotherapy or psychoanalysis with regular psychotherapeutic sessions over a period of time.

The aim of such treatment should be investigative and point toward the uncovering and understanding of basic conflicts and sources of anxiety. Fromm-Reichmann[7] has pointed out the agreement of "all schools of psychoanalytically dynamic psychotherapy" in considering "interpretive recall of repressed emotional material an integral part of intensive psychotherapy." Patients also learn, of course, to tolerate their anxiety and tension.

In the treatment process the patient will use defenses against anxiety related to his general character traits. This brings us to the therapeutic handling of resistance in therapy, a subject too complex to deal with here. Thompson[8] summarized how resistance works in pointing out that the counter force (against return of the repressed idea) is furnished by the defense system of the ego. Any attempt to break this down brings anxiety. The automatic response is to avoid this. "So the threat of anxiety furnishes the motive for resistance to insight." Sharpe[9] has presented a good survey of some of the defenses against anxiety in treatment. Fromm-Reichmann[10] has presented in turn a good survey of factors in the therapist affecting the treatment situation.

In general, the more acute the condition, the more favorable is the response to correct therapy. Where the symptoms have been closely related to situational factors, there may be less repressed material to uncover. However, certain cases are both protracted and refractive to therapeutic endeavors. The interested general practitioner may be able to handle mild cases, particularly where treatment is not protracted and he is not likely to become involved in an unfamiliar maze of transference problems. Ferenczi,[11] who noted that "In mild cases suggestion or a superficial analysis may be successful," also reported a case supporting the warning about transference problems—". . . I once dismissed a remark (of the patient's) a little impatiently (and) he got a severe anxiety attack. . . ."

The physical examination should be done thoroughly and, once negative findings are ascertained, should not be repeated unless something new or disturbing to the physician himself should develop. Too frequent examinations serve only to arouse the patient's anxiety. The physician must himself be secure in his findings. When he has arrived at a diagnosis, he may, in a kindly but matter-of-fact fashion, explain to his patient how emotions can alter physiology. Examples can help.

Most patients with a reasonable level of intelligence can be helped to understand how their emotional feelings can result in physiologic changes and how these in turn can lead to subjective sensations and symptoms. One certainly wants to avoid surgical procedures when these are not clearly indicated, regardless of the patient's desire or insistence that these be undertaken. The following is an example of a case in which undue emphasis and significance were attached to the physiologic features of an emotional illness.[5]

Case 10. A 29-year-old real estate salesman became increasingly worried and anxious. He was restless and troubled with insomnia, and began drinking coffee incessantly. He developed intermittent palpitation and worried about his sexual abilities. One day while riding in a crowded bus he had a typical acute anxiety attack. He reported to a physician who was impressed by the palpitation.

The physician focused his attention (and that of the patient) on the examination of the heart and the heart's function on this occasion and on repeated subsequent examinations. Quite possibly the physician was more at home in exploring this familiar pathway of possible organicity than emotional ones which were perhaps not only less well known but uncomfortable as well. However, the patient developed a fear of heart disease as a consequence. His "awareness" of his heart increased pathologically and became most disturbing to him.

Under later psychiatric treatment some of the dynamic factors in the patient's anxiety were uncovered, and his symptoms largely disappeared. This, however, was a long and difficult process requiring many months of psychotherapeutic investigation. If the physician who had originally examined him after the first anxiety attack had been able to make a clear statement as to the absence of organic heart disease and had not focused the patient's attention on his heart action, this particular aspect of his illness would have been averted, and he would have been spared some needless suffering, expense and time.*

The physician had best avoid telling his patient to stop worrying. The patient would be only too happy to do this if he could. He cannot do it voluntarily, and many patients will resent such advice from family, friends, or physician. The physician must not tell the patient that "there is nothing wrong" or that his illness or symptoms are "imagined." This applies to all contacts with patients who have emotional symptoms.

The patient himself knows that something is wrong with him, since to him the discomfort is very real. For the doctor to tell him that "there is nothing wrong" is to convey to him that the physician is concealing the truth, or the patient may conclude that the doctor doesn't know what he is talking about. Further, patients, whose emotional symptoms are very real to them (although often largely subjective), will very much resent the implications (that he is dishonest or a fool) when a physician implies that symptoms are "imaginary." This kind of statement is poorly calculated to promote increased respect for the doctor.

When the patient is possessed of unrealistically high standards as regards his mission in life, sometimes the discrepancy between capability and goals can be adjusted. Suggestions as to recreation, hobbies, and new avenues of interest may be useful. The patient may, of course, have tried many of these himself. He must be reminded, when appropriate, that escape offers no real solution to conflict. This applies to such superficial attempted solutions as a move to another part of the country. Sedation when needed should be judiciously prescribed and carefully controlled. It must be regarded as a temporary support only.

Finally, it is important to note that for psychotherapy to have any chance for success the patient must assume responsibility for taking an active role in the treatment process. He cannot resign himself to the hands of the doctor. He must accept a role of active collaboration which will involve considerable hard work and not infrequently discomfort. Dunbar[12] has well pointed out the importance of the patient's attitude to prognosis in various kinds of illness. For psychotherapy to be successful the patient must not only want to get well but he must give genuine and whole-hearted coöperation to his therapist.

Summary

This paper presents a brief discussion of the anxiety reactions. These have been classified for purposes of convenience into the acute anxiety attack or panic, anxiety and tension states, and the anxiety neurosis. The summary of the "Nature and Origins of Anxiety" in the August issue is here followed by a discussion of the neuroses proper, of which the anxiety reaction illustrates the type of emotional illness in which anxiety is the most prominent feature and in which it is expressed most directly.

(*Continued on page 516*)

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* This case was contributed by Dr. M. deG. Ruffin.

24th ANNUAL SCIENTIFIC ASSEMBLY

HOTEL STATLER
WASHINGTON, D. C.
October 5-6-7, 1953

Guest Speakers

John Bozicevich, B.S., M.A.
Head, Section on Clinical Immunology, Laboratory of Tropical Diseases, National Microbiological Institute, National Institutes of Health

Otto Brantigan, M.D.
Professor of Thoracic Surgery and Professor of Clinical Surgery, University of Maryland School of Medicine, Baltimore, Md.

Colonel Ogden C. Bruton, M.C., U.S.A.
Chief of Pediatrics, Walter Reed Army Hospital

Commander Chalmers Carr, M.C., U.S.N.
Chief of Orthopedic Service, U.S. Naval Hospital

Lewis L. Coriell, M.D.
Associate Professor of Immunology in Pediatrics, University of Pennsylvania School of Medicine

Dorland J. Davis, M.D.
Laboratory of Infectious Diseases, National Microbiological Institute, National Institutes of Health

Robert B. Greenblatt, M.D.
Professor of Endocrinology, Medical College of Georgia, Augusta, Ga.

Clarence A. Imboden, Jr., M.D.
Laboratory of Clinical Investigation, National Microbiological Institute, National Institutes of Health

S. Leon Israel, M.D.
Associate Professor of Obstetrics and Gynecology, Graduate School of Medicine, University of Pennsylvania, Philadelphia, Pa.

Louis N. Katz, M.D.
Director of Cardiovascular Department, Medical Research Institute, Michael Reese Hospital, Chicago, Ill.; Past President, American Heart Association

Arthur M. Master, M.D.
Cardiologist, Mt. Sinai Hospital, New York, N. Y.

Norman B. McCullough, M.D.
Chief, Laboratory of Clinical Investigation, National Microbiological Institute, National Institutes of Health

Ade T. Milhorat, M.D.
Chairman, Medical Advisory Board, Muscular Dystrophy Associations of America; Associate Professor of Medicine, Cornell University Medical College; Attending Physician, New York Hospital, New York, N. Y.

Richard Overholt, M.D.
Clinical Professor of Surgery, Tufts College School of Medicine; Thoracic Surgeon, New England Deaconess Hospital and the New England Center Hospital, Boston, Mass.

Charles W. Rees, Ph.D.
Head, Section on Protozoal Diseases, Laboratory of Tropical Diseases, National Microbiological Institute, National Institutes of Health

Edmund J. Talbott, M.D.
Laboratory of Tropical Diseases, National Microbiological Institute, National Institutes of Health

John E. Tobie, Ph.D.
Laboratory of Tropical Diseases, National Microbiological Institute, National Institutes of Health

Harold R. Wainerdi, M.D.
Medical Director, Multiple Sclerosis Society, New York, N. Y.

Robert Ward, M.D.
Professor of Pediatrics, New York University College of Medicine, New York, N. Y.

Paul P. Weinstein, D.Sc.
Laboratory of Tropical Diseases, National Microbiological Institute, National Institutes of Health

William W. Welsh, M.D.
Attending Internist, Chestnut Lodge, Rockville, Md.

Nathan Womack, M.D.
Department of Surgery, University of North Carolina School of Medicine, Chapel Hill, N. C.

Harold A. Zintel, M.D.
Department of Surgery, University of Pennsylvania School of Medicine, Philadelphia, Pa.

SCIENTIFIC PROGRAM

All Sessions in the Presidential Ballroom, Hotel Statler

MONDAY, OCTOBER 5—MORNING SESSION

9:30 Vaccination against Influenza

Dorlan J. Davis, M.D.

Laboratory of Infectious Diseases, National Microbiological Institute, National Institutes of Health, Public Health Service, Bethesda, Md.

10:00 The Use of Immune Sera in Preventing Poliomyelitis, Infectious Hepatitis, Mumps and German Measles

Lewis L. Coriell, M.D.

Associate Professor of Immunology in Pediatrics, University of Pennsylvania School of Medicine; Senior Physician, Children's Hospital of Philadelphia; Medical Director of Camden (New Jersey) Municipal Hospital for Contagious Diseases

10:35 Congenital Absence of Gamma Globulin

Colonel Ogden C. Bruton, M.C., U.S.A.

Chief of Pediatrics, Walter Reed Army Hospital

11:00 Poliomyelitis—Modes of Transmission and Present Status of Vaccines

Robert Ward, M.D.

Professor of Pediatrics, New York University College of Medicine

11:30 Recess for Luncheon

MONDAY, OCTOBER 5—AFTERNOON SESSION

Panel Discussion on Some Gynecological Problems of Every Day Practice

Samuel M. Dodek, M.D., *Moderator*

Assistant Clinical Professor of Obstetrics and Gynecology, George Washington University School of Medicine

2:00 Treatment of Menstrual Disorders

Robert B. Greenblatt, M.D.

Professor of Endocrinology, Medical College of Georgia, Augusta, Georgia

2:10 Vaginal Discharges

Andrew A. Marchetti, M.D.

Professor of Obstetrics and Gynecology, Georgetown University School of Medicine

2:20 THE MANAGEMENT OF INFERTILITY
S. Leon Israel, M.D.
Associate Professor of Obstetrics and Gynecology, Graduate School of Medicine, University of Pennsylvania, Philadelphia

2:45 QUESTION AND ANSWER PERIOD

4:00 RECESS

TUESDAY, OCTOBER 6—MORNING SESSION

9:30 THE ROLE OF DIET IN THE THERAPY OF CORONARY HEART DISEASE
Louis N. Katz, M.D.
Director of Cardiovascular Department, Medical Research Institute, Michael Reese Hospital, Chicago; Past President, American Heart Association

10:00 THE ROLE OF EFFORT IN CORONARY OCCLUSION AND CORONARY INSUFFICIENCY
Arthur M. Master, M.D.
Cardiologist, Mt. Sinai Hospital, New York

10:40 PANEL DISCUSSION ON TRAUMA AND HEART DISEASE
Bernard J. Walsh, M.D., *Moderator*
Associate Clinical Professor of Medicine, Georgetown University School of Medicine; Cardiologist, Children's Hospital; Cardiologist, District of Columbia Health Department

PARTICIPANTS

Clayton B. Ethridge, M.D.
Clinical Professor of Medicine, George Washington University School of Medicine; President, Washington Heart Association

Louis N. Katz, M.D.
Chicago

Arthur M. Master, M.D.
New York

11:30 RECESS FOR LUNCHEON

TUESDAY, OCTOBER 6—AFTERNOON SESSION

2:00 ADRENAL SURGERY
Harold A. Zintel, M.D.
Department of Surgery, University of Pennsylvania School of Medicine, Philadelphia

2:30 GALL BLADDER SURGERY
Nathan Womack, M.D.
Department of Surgery, University of North Carolina School of Medicine, Chapel Hill

3:00 HEAD INJURIES
Hugo V. Rizzoli, M.D.
Associate in Neurosurgery, George Washington University School of Medicine

3:30 MANAGEMENT OF RECTAL DISEASE
Walter H. Gerwig, Jr., M.D.
Assistant Clinical Professor of Surgery, George Washington University School of Medicine; Chief of Proctology Clinic, George Washington University Hospital

4:00 RECESS

WEDNESDAY, OCTOBER 7—MORNING SESSION

9:30 CARCINOMA OF THE LUNG
Richard Overholt, M.D.
Clinical Professor of Surgery, Tufts College School of Medicine; Thoracic Surgeon, New England Deaconess Hospital and the New England Center Hospital, Boston

10:00 MEDIASTINAL AND CHEST WALL TUMORS
Otto Brantigan, M.D.
Professor of Thoracic-Surgery and Professor of Clinical Surgery, University of Maryland, Baltimore

10:40 PANEL DISCUSSION ON CHEST PROBLEMS OF IMPORTANCE TO THE SURGEON AND INTERNIST

Sol Katz, M.D., *Moderator*
Chief of the Pulmonary Disease Division, District of Columbia General Hospital; Adjunct Clinical Professor of Medicine, Georgetown University and George Washington University Schools of Medicine

PARTICIPANTS

Richard Overholt, M.D.
Boston

Otto Brantigan, M.D.
Baltimore

11:30 RECESS FOR LUNCHEON

WEDNESDAY, OCTOBER 7—AFTERNOON SESSION

SYMPOSIUM ON THERAPY IN NEUROLOGY

Jonathan M. Williams, M.D., *Moderator*

Assistant Professor of Neuro-Surgery, George Washington University School of Medicine

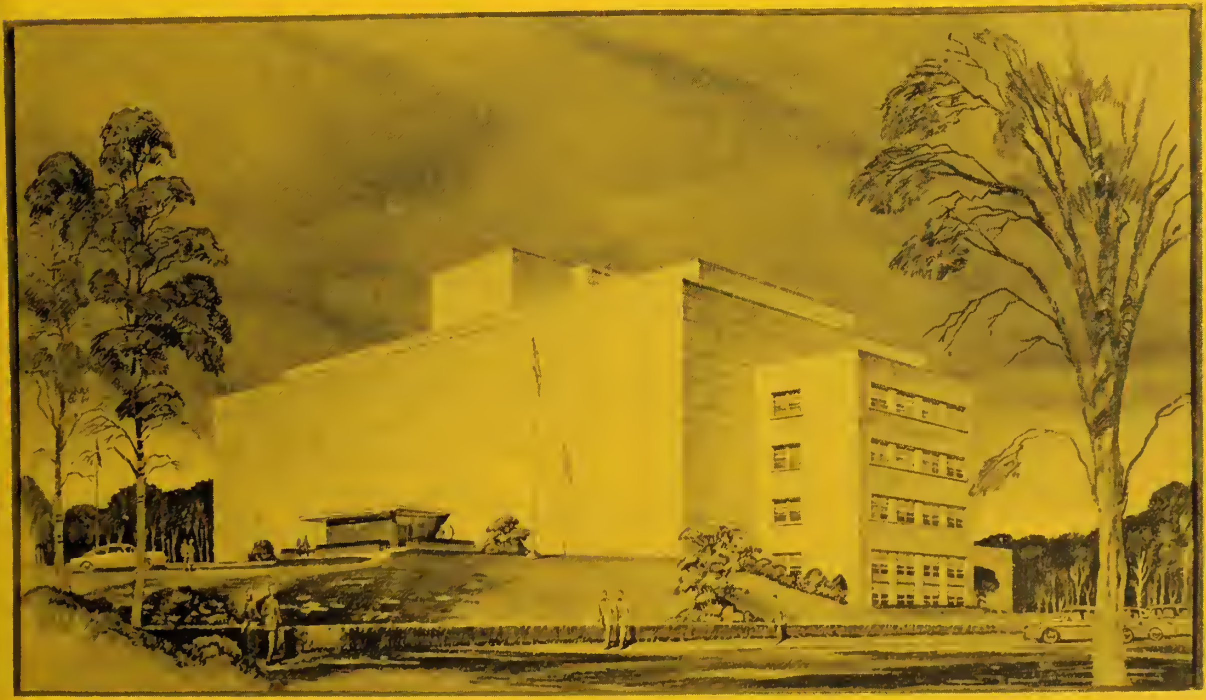
2:00 THERAPY IN MUSCULAR DYSTROPHY
Ade T. Milhorat, M.D.
Chairman, Medical Advisory Board, Muscular Dystrophy Associations of America; Associate Professor of Medicine, Cornell University Medical College

2:25 THERAPY IN EPILEPSY
Francis M. Forster, M.D.
Dean, Georgetown University School of Medicine

2:50 PROBLEMS IN THE MANAGEMENT OF PATIENTS WHO HAVE MULTIPLE SCLEROSIS
Harold R. Wainerdi, M.D.
Medical Director, Multiple Sclerosis Society, New York

3:10 REHABILITATION IN NEUROLOGIC DISORDERS
Pearce Bailey, M.D.
Director, National Institute of Neurologic Diseases and Blindness, National Institutes of Health

3:30 QUESTION AND ANSWER PERIOD



The architect's drawing of the new ARMED FORCES INSTITUTE OF PATHOLOGY to be located on the grounds of Walter Reed Army Hospital. The cornerstone laying ceremonies will be held on October 20, 1953.

Round Table Discussions

The Round Table Discussions, now a permanent feature of the Assembly, were planned in response to a demand for a scientific program of interest to physicians in the limited specialties. Physicians who wish to attend any of the following discussions should forward their reservations to the Committee on Arrangements, 24th Annual Scientific Assembly, 1718 M Street, N.W., not later than September 30. Each Round Table will be limited to 50 participants.

MONDAY, OCTOBER 5, 1953—2:00 to 4:00 P.M.

SECTION ON PSYCHIATRY

New York Room, Hotel Statler

SYMPOSIUM ON PSYCHIATRY IN GENERAL PRACTICE

DANIEL BLAIN, M.D., *Moderator and Chief Discussant*

Medical Director, American Psychiatric Association; Clinical Professor of Psychiatry, Georgetown University School of Medicine

PARTICIPANTS

Zigmond M. Lebensohn, M.D.
Associate Professor of Psychiatry, Georgetown University School of Medicine

Robert T. Morse, M.D.
Clinical Assistant Professor of Psychiatry, Georgetown University School of Medicine

Marshall deG. Ruffin, M.D.
Assistant Clinical Professor of Psychiatry, George Washington University School of Medicine

I. Phillips Frohman, M.D.
Washington

Lewis A. Klein, M.D.
Washington

MONDAY, OCTOBER 5, 1953—2:00 to 4:00 P.M.

SECTION ON ORTHOPEDICS

Ohio Room, Hotel Statler

FRANK M. HAND, M.D., *Moderator and Chief Discussant*

Associate Professor of Orthopedic Surgery, Georgetown University School of Medicine

PARTICIPANTS

Carl Berg, M.D.
Assistant Clinical Professor of Orthopedic Surgery, George Washington University School of Medicine

Commander Chalmers Carr, M.C., U. S. N.
Chief of Orthopedic Service, U.S. Naval Hospital, Bethesda, Maryland

Milton C. Cobey, M.D.
Associate Professor of Orthopedic Surgery, Georgetown University School of Medicine

Julius S. Neviaser, M.D.
Assistant Clinical Professor of Orthopedic Surgery, George Washington University School of Medicine

TUESDAY, OCTOBER 6, 1953—2:00 to 4:00 P.M.

SECTION ON PUBLIC HEALTH

New York Room, Hotel Statler

SYMPOSIUM ON ANTICIPATORY MEDICINE IN MATURITY

EDWARD J. STIEGLITZ, M.D., *Moderator and Chief Discussant*

Consultant in Geriatrics, Chestnut Lodge, Rockville, Md.

PARTICIPANTS

Thomas McPherson Brown, M.D.
Professor of Medicine, George Washington
University School of Medicine
DeWitt E. DeLawter, M.D.
Clinical Instructor in Medicine, Georgetown
University School of Medicine
William W. Welsh, M.D.
Attending Internist, Chestnut Lodge, Rockville, Md.

TUESDAY, OCTOBER 6, 1953—2:00 to 4:00 P.M.

SECTION ON DERMATOLOGY

Ohio Room, Hotel Statler

SYMPOSIUM ON WHAT'S NEW AND USEFUL IN DERMATOLOGY

ROBERT STOLAR, M.D., *Moderator and Chief Discussant*

Assistant Professor of Dermatology and Syphilology, Georgetown University School of Medicine

PARTICIPANTS

Russell J. Fields, M.D.
Chief of Division of Dermatology, Doctors Hospital;
Senior Attending on Dermatology, Garfield
Memorial Hospital, Washington
Naomi M. Kanof, M.D.
Instructor in Dermatology, Georgetown University
School of Medicine
Arnold H. Gould, M.D.
Assistant Clinical Professor of Dermatology,
Georgetown University School of Medicine
Lawrence B. McCaleb, M.D.
Instructor in Dermatology, Georgetown University
School of Medicine
Marc A. Weiner, M.D.
Washington
Reuben Goodman, M.D.
Instructor in Dermatology, George Washington
University School of Medicine
Manuel P. Landman, M.D.
Assistant Attending Dermatologist, Suburban
Hospital, Bethesda, Md.
Peter N. Horvath, M.D.
Instructor in Dermatology, Georgetown University
School of Medicine
Raymond A. Osbourn, M.D.
Clinical Assistant Professor of Dermatology,
Georgetown University School of Medicine
James Q. Gant, M.D.
Associate in Dermatology, George Washington
University School of Medicine

WEDNESDAY, OCTOBER 7, 1953—2:00 to 4:00 P.M.

SECTION ON GASTROENTEROLOGY

New York Room, Hotel Statler

SYMPOSIUM ON AMOEBIASIS AND PARASITIC INFESTATIONS

HENRY A. MONAT, M.D., *Moderator and Chief Discussant*

Chairman, Section on Gastroenterology, The Medical Society of the District of Columbia

PARTICIPANTS

John Bozicevich, B.S.
Head, Section on Clinical Immunology, Laboratory of Tropical Diseases, National Microbiological Institute, National Institutes of Health, U. S. Public Health Service, Bethesda, Md.

William T. Gibb, M.D.
Assistant Clinical Professor of Medicine, George Washington University School of Medicine

Clarence A. Imboden, Jr., M.D.
Laboratory of Clinical Investigation, National Microbiological Institute

Charles W. Rees, M.D.
Head, Section on Protozoal Diseases, Laboratory of Tropical Diseases, National Microbiological Institute

Edmund J. Talbott, M.D.
Laboratory of Tropical Diseases, National Microbiological Institute

John E. Tobie, M.D.
Laboratory of Tropical Diseases, National Microbiological Institute

Paul P. Weinstein, D.Sc.
Laboratory of Tropical Diseases, National Microbiological Institute

WEDNESDAY, OCTOBER 7, 1953—3:00 to 4:00 P.M.

SECTION ON RADIOLOGY

Ohio Room, Hotel Statler

SYMPOSIUM ON RADIOLOGICAL EMERGENCIES

ISIDORE LATTMAN, M.D., *Moderator*

Associate Professor of Radiology, Georgetown University School of Medicine

DISCUSSANTS

Harry H. Kerr, M.D.
Consulting Staff in Surgery, Garfield Memorial Hospital, Washington

Henry C. Macatee, M.D.
Consulting Staff in Medicine, Garfield Memorial Hospital, Washington

Julius S. Neviaser, M.D.
Washington

ESSAYISTS

Willy E. Baensch, M.D.
Professor of Radiology, Georgetown University School of Medicine

Alfred A. J. Den, M.D.
Washington

Charles H. Kelley, M.D.
Chief, Division of Radiology, Freedmen's Hospital, Washington

William W. Stanbro, M.D.
Professor of Radiology, George Washington University School of Medicine

Alvin C. Wyman, M.D.
Clinical Instructor in Radiology, George Washington University School of Medicine

The Scientific Exhibit

The Scientific Exhibit will be on display in the South American and the California Rooms of the Hotel Statler. Below is a list of the exhibits and the sponsors:

Titles	*Exhibitors*
Aids to the Professions in Cardiovascular Education	National Heart Institute, National Institutes of Health, U. S. Public Health Service
Anatomy of the Stellate Ganglion and Its Surgical Approach	Felipe A. Martinez, M.D., Department of Anatomy, Georgetown University School of Medicine
Anesthesia for Pediatric Surgery	Charles E. Fierst, M.D., Children's Hospital
Aortography	E. Converse Peirce II, M.D., National Heart Institute, National Institutes of Health, U. S. Public Health Service
Bacterial Resistance in Antibiotic Therapy	Colonel Dwight Kuhns, M.C., U. S. A., Walter Reed Army Hospital
Basal Body Temperature and Urinary Pregnanediol	Richard H. Fischer, M.D., Doctors Hospital Research Foundation
Chemotherapy of Tuberculosis: Laboratory and Clinical Studies	Sol Katz, M.D., Monroe Romansky, M.D., Patrick Storey, M.D., George McCormick, M.D., and Edward Marshall, D.Sc., Pulmonary Disease Division, District of Columbia General Hospital
Cinefluorography-Cardiovascular (Image Amplification Technic)	William L. Howell, M.D., Heart Clinic, Garfield Memorial Hospital
Classification of Tumors of the Skin	Raymond A. Osbourn, M.D., Department of Dermatology, Georgetown University School of Medicine
Control of Intractable Pain	John P. Gallagher, M.D., and Thomas F. McDermott, M.D., Georgetown University School of Medicine
Control of Lactation with a Single Dose of a Long-Acting Androgen	Samuel M. Dodek, M.D., Joseph M. Friedman, M.D., Harvey Marcellus, M.D., and Peter Soyster, M.D., Department of Obstetrics and Gynecology, George Washington University School of Medicine
Cortisone in Rh Incompatibilities	Oscar B. Hunter, Jr., M.D., Doctors Hospital Research Foundation
Diseases of the Ear Drum—A New Technic for Teaching Diseases of the Middle Ear	Irvin Hantman, M.D., Department of Otolaryngology, Episcopal Eye, Ear and Throat Hospital and Georgetown University School of Medicine
Endocardial Fibroelastosis	E. Clarence Rice, M.D., and David F. Bell, Jr., M.D., Children's Hospital
Exophthalmus	Robert E. Moran, M.D.
Fructose in Diabetic Emergencies	Henry Dolger, M.D., Mount Sinai Hospital, New York, N. Y.
Medical Writing by the General Practitioner	I. Phillips Frohman, M.D.
Neurotic Art	John R. Cavanagh, M.D.

Titles	*Exhibitors*
OPTIMUM SITES FOR LOCAL ANESTHESIA	Othmar Solnitsky, M.D., Department of Anatomy, Georgetown University School of Medicine
PLASTIC CAST	Milton C. Cobey, M.D.
PLASTIC AND RECONSTRUCTIVE SURGERY	Arthur Dick, M.D.
PRACTICAL ELECTROCARDIOGRAPHIC ANALYSIS	Leslie French, M.D.
PREFRONTAL LOBOTOMY IN CHRONIC SCHIZOPHRENIA	Richard L. Jenkins, M.D., James Q. Holsopple, Ph.D., Maurice Lorr, Ph.D., Psychiatry and Neurology Division, Veterans Administration
RESILIENT PLASTIC REPLICAS OF PATHOLOGICAL SPECIMENS AND THEIR CLINICAL APPLICATIONS	Clemner M. Peck, M.D., and Forrest V. Schumacher, M.D., Groover, Christie & Merritt
RETICULOENDOTHELIOSES	Isadore Lattman, M.D., and Joseph M. LoPresti, M.D., Children's Hospital
SOME FUNDAMENTALS OF WOUND HEALING	Philip A. Caulfield, M.D., and Howard S. Madigan, M.D., Department of Surgery, Georgetown University School of Medicine

Public Health Exhibit

The Public Health Exhibit will be situated in the Federal Room, Foyer Three, and on the Capital Terrace. The Exhibit will be open to the general public daily from 9:30 a.m. to 5:00 p.m. and on Tuesday evening from 7:00 p.m. to 8:15 p.m. Doctors and their patients and friends are invited to view this Exhibit. Following is the list of exhibits and their sponsors:

Titles	*Exhibitors*
BIZARRE INSULIN REACTIONS	District of Columbia Diabetes Association
CAMERA IN MEDICINE	Bureau of Medicine and Surgery, National Naval Medical Center
CANCER OF THE LUNG	District of Columbia Division, American Cancer Society, Inc.
CENTURY OF PROGRESS IN AMERICAN PHARMACY	American Pharmaceutical Association and District of Columbia Pharmaceutical Association
CEREBRAL PALSY	District of Columbia Society for Crippled Children, Inc.
COMMUNITY SERVICE THROUGH NURSING	Graduate Nurses' Association of the District of Columbia
DIAGNOSIS OF POLIOMYELITIS	District of Columbia Chapter, National Foundation for Infantile Paralysis, Inc.
FOOD AND DRUG ADMINISTRATION PROTECTS THE PUBLIC HEALTH	Food and Drug Administration, Department of Health, Education and Welfare
GLOBAL PREVENTIVE MEDICINE PROGRAM OF THE UNITED STATES AIR FORCE MEDICAL SERVICE	Major General Harry G. Armstrong, The Surgeon General of the Air Force
HALF OF ALL CANCER INVOLVES SITES ACCESSIBLE TO DIRECT EXAMINATION	William S. Baum, M.D., Cancer Control Branch, National Cancer Institute, National Institutes of Health, USPHS
HEALTH SECURITY FOR THE INSECURE	Hospital Service Agency of the National Capital Area
HELPS FOR HEARING	Washington Hearing Society
HOW THE VISITING NURSE HELPS	Instructive Visiting Nurse Society

Titles	*Exhibitors*
MECHANICAL QUACKERY	American Medical Association
MEDICAL BUREAU	Medical Bureau, The Medical Society of the District of Columbia
MEDICINE AND RESEARCH IN DIVING	Lt. E. H. Lamphier, M.C., U.S.N.R., Experimental Diving Unit, U. S. Naval Gun Factory
ORGANS OF THE HUMAN BODY	American Medical Association
PICTURES BY PATIENTS FROM ST. ELIZABETHS HOSPITAL	Winfred Overholser, M.D., Superintendent, and Mr. Prentiss Taylor, Recreation Leader (Arts and Crafts), St. Elizabeths Hospital
PLASTIC SPLINTS	Major Robert W. Parvin, M.C., U.S.A., and Major Coursen B. Conklin, M.C., U.S.A., Walter Reed Army Hospital
PRENATAL OSSIFICATION IN MAN	Ira R. Telford, Ph.D., Professor of Anatomy, George Washington University School of Medicine
PREVENT HOME EYE ACCIDENTS	Prevention of Blindness Society of Metropolitan Washington
PROSTHETIC TRAINING FOR THE UPPER EXTREMITY AMPUTEE WITH CINEPLASTY	Lt. Colonel John Kuitert, M.C., U. S. A., Walter Reed Army Hospital
RED CROSS BLOOD DERIVATIVE DISPLAY	District of Columbia Chapter, American Red Cross
ROUTINE X-RAY OF HOSPITAL ADMISSIONS	District of Columbia Tuberculosis Association
SAFETY CRUSADE	Department of Vehicles and Traffic, Government of the District of Columbia
SERVICE THROUGH COORDINATION—WORKING TOGETHER FOR WASHINGTON'S HEALTH	Health Section, United Community Services
SOCIAL HYGIENE CONSERVES COMMUNITY HEALTH	District of Columbia Social Hygiene Society and American Social Hygiene Association
TELEVISION AND THE PUBLIC HEALTH PROGRAM OF ALCOHOLISM	Alcoholic Rehabilitation Clinic, District of Columbia Health Department, and Station WTOP-TV, Columbia Broadcasting System
THE 3 R'S OF THE WASHINGTON HEART ASSOCIATION	Washington Heart Association
WASHINGTON BLUE SHIELD PLAN	Medical Service of the District of Columbia

Motion Pictures

Physicians in attendance at the 24th ANNUAL SCIENTIFIC ASSEMBLY will have an opportunity of viewing the best scientific films available. Included will be motion pictures produced by Washington physicians.

The scientific program was taken into consideration, as usual, in selecting this year's films. Motion pictures will be shown in the Michigan Room on the mezzanine of the Hotel Statler. The enlarged motion picture schedule will include an Encore Hour each afternoon during which time films will be reshown by special request.

The Charles Pfizer and Company, Inc. will sponsor "A Demonstration of 3-D Cinefluorography" daily in the Massachusetts Room. This will be the second major showing of the demonstration in the United States and should prove to be an exciting experience to all physicians who attend.

A daily schedule of motion pictures and the time they will be shown will be published in the official ASSEMBLY program to be distributed at the Registration Section.

Assembly Calendar

All Meetings at the Hotel Statler

MONDAY, OCTOBER 5, 1953

Dr. Bryner

8:30 A.M.: Registration

9:00 A.M.–12:00 Noon: Motion Pictures

9:30 A.M.–11:30 A.M.: Scientific Program*

11:00 A.M.: Special White House Tour. Limited to physicians and wives who register for the Assembly on or before October 1.

12:15 P.M.–1:30 P.M.: Medical Society Luncheon, Presidential Ballroom

Speaker: **U. R. Bryner, M.D.,** *President, American Academy of General Practice*

Subject: "Specialist and General Practice Medical Care under the National Health Service of Great Britain."

Presentation of the John Benjamin Nichols Award of the Medical Society of the District of Columbia (Recipient to be Announced)

2:00 P.M.–4:00 P.M.: Round Table Discussions

2:00 P.M.–4:30 P.M.: Scientific Program

2:00 P.M.–5:00 P.M.: Motion Pictures

7:00 P.M.–(6:30 P.M. Cocktails): Women's Medical Society Dinner

Speaker to be announced

Mr. Peterson

TUESDAY, OCTOBER 6, 1953

9:00 A.M.: Registration

9:00 A.M.–12:00 Noon: Motion Pictures

9:30 A.M.–11:30 A.M.: Scientific Program

12:15 P.M.–1:30 P.M.: Georgetown University Medical Alumni Luncheon, Presidential Ballroom

Speaker: **Val Peterson,** *Administrator, Federal Civil Defense Administration; former Governor of Nebraska*

Subject: "World's-Eye View of Civil Defense"

2:00 P.M.–4:00 P.M.: Round Table Discussions

2:00 P.M.–4:30 P.M.: Scientific Program

2:00 P.M.–5:00 P.M.: Motion Pictures

4:00 P.M.–6:00 P.M.: Tea for Wives of Physicians

7:00 P.M.: Dinner For Doctors' Secretaries, Assistants, Nurses, Technicans and Receptionists, Presidential Ballroom

Speaker: **W. W. Bauer, M.D.,** *Director, Bureau of Health Education, American Medical Association; Editor, Today's Health*

Subject: "Patients and Impatience"

Dr. Bauer

WEDNESDAY, OCTOBER 7, 1953

9:00 A.M.: Registration

9:00 A.M.–12:00 Noon: Motion Pictures

9:30 A.M.–11:30 A.M.: Scientific Program

12:15 P.M.–1:30 P.M.: George Washington University Medical Society Luncheon, Presidential Ballroom

Speaker: **Dr. Allen V. Astin,** *National Bureau of Standards, Washington*

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* The Scientific Program will be presented in the Presidential Ballroom throughout the meeting.

SUBJECT:

2:00 P.M.–4:00 P.M.: Round Table Discussion

2:00 P.M.– 4:30 P.M.: Scientific Program

2:00 P.M.–5:00 P.M.: Motion Pictures

8:00 P.M. (7:00 P.M. Cocktails): Annual Dinner, Presidential Ballroom

SPEAKER: **Edward J. McCormick, M.D.,** *President, American Medical Association*

A special feature will be the awarding of a Certificate for Meritorious Service to WILLIAM P. HERBST, M.D., Washington.

Dr. McCormick

AAGP Participation

For the first time, State Chapters of the American Academy of General Practice in the District of Columbia and nearby states, i.e., Maryland, Virginia, West Virginia, Delaware, Pennsylvania, and North Carolina, are coöperating with the Committee on Arrangements for the ASSEMBLY in an effort to have as many of their members participate as possible. Steps were taken to obtain this coöperation when it was learned from the District Chapter of AAGP that the ASSEMBLY had been approved by the national organization for postgraduate training of AAGP members. The necessary concurrence by State Chapters was subsequently obtained. Credit up to a total of 18 hours will be given AAGP members who attend all sessions of the ASSEMBLY.

AAGP members who are not members of the Medical Society of the District of Columbia will not be required to pay registration fees but must present membership cards for identification.

Registration

Arrangements have been made to register members of the Medical Society prior to the opening of the ASSEMBLY at the Society's Executive Offices on Thursday, October 1, and Friday, October 2, between 9:00 a.m. and 5:00 p.m.

The Registration Section at the Hotel Statler will be open at 8:30 a.m. on Monday, October 5. Visiting physicians, medical officers of the various branches of Government service, and Society members not previously registered may register and secure their badges at the Registration Section. Invitations have been extended to residents, interns, dentists, pharmacists, medical students, and others to register for the ASSEMBLY at the Hotel. No one will be admitted to the scientific sessions or exhibits without a badge.

There will be a registration fee of $3.00 for visiting physicians and non-members of the Society, except officers of the Army, Navy and Public Health Service, and physicians employed by the Veterans Administration and other Government agencies, who will be admitted without paying a registration fee. Members of the American Academy of General Practice will also be registered as guests of the Society upon presentation of their Academy membership cards at the Registration Section.

Members planning to attend the Medical Society's luncheon on the opening day of the ASSEMBLY, Monday, October 5, must register and secure their tickets at the Society's Executive Offices on Thursday or Friday before the ASSEMBLY. Each Active member is entitled to one ticket without charge as long as they last. Associate members and non-members of the Society may purchase luncheon tickets at a cost of $3.50 each.

Tickets for the luncheons given by the Georgetown University Medical Alumni Association and the George Washington University Medical Society may be obtained at the Registration Section.

The Technical Exhibit

The Technical Exhibit will be on display in the Congressional Room and the Foyer. A list of the exhibitors follows:

Abbott Laboratories	(Booth 22)
Aloe, A. S., Company	(Booth 41)
Ames Company, Inc.	(Booth 43)
Arcum Pharmaceuticals, Inc.	(Booth 45)
Ayerst, McKenna & Harrison, Ltd.	(Booth 20)
Beuchler's	(Booth 28)
Bilhuber-Knoll Corporation	(Booth 14)
Borden Company	(Booth 7)
Burroughs, Wellcome & Co., Inc.	(Booth 38)
Burton, Parsons & Company	(Booth 48)
Camel Cigarettes	(Booth 24)
Ciba Pharmaceutical Products, Inc.	(Booth 21)
Davies, Rose & Co., Ltd.	(Booth 33)
Doak Company, Inc.	(Booth 11)
Doho Chemical Corporation	(Booth 31)
Fleet, C. B., Company, Inc.	(Booth 25)
Gibson Company	(Booth 3)
Haskell, Charles C., & Co., Inc.	(Booth 35)
Hoffman-La Roche Company	(Booth 47)
Kloman Instrument Company, Inc.	(Booth 39)
Lederle Laboratories	(Booth 42)
Liebel-Flarsheim Company	(Booth 18)
Lilly, Eli, & Company	(Booth 30)
M & R Laboratories	(Booth 4)
Maxwell & Tennyson	(Booth 34)
Mead Johnson & Company	(Booth 29)
Merrell, William S., Company	(Booth 6)
Merck and Company, Inc.	(Booth 44)
National Drug Company	(Booth 2)
Parke, Davis and Company	(Booth 36)
Peoples Drug Stores, Inc.	(Booth 37)
Pet Milk Company	(Booth 5)
Pfizer, Charles, and Co., Inc.	(Booth 9)
Philip Morris & Co., Ltd., Inc.	(Booth 32)
Roerig, J. B. & Company	(Booth 49)
Sanborn Company	(Booth 26)
Sandoz Pharmaceuticals	(Booth 16)
Saunders, W. B., Company	(Booth 23)
Schering Corporation	(Booth 40)
Searle, G. D., & Company	(Booth 46)
Sharpe & Dohme, Inc.	(Booth 12)
Smith, Kline & French Laboratories	(Booth 27)
Squibb, E. R., & Sons	(Booth 15)
U. S. Vitamin Corporation	(Booth 13)
Vanpelt and Brown, Inc.	(Booth 8)
Walker Laboratories, Inc.	(Booth 1)
White Laboratories, Inc.	(Booth 17)
Williams & Wilkins Company	(Booth 19)
Winthrop-Stearns Inc.	(Booth 10)

President's Page

SCHOOL HEALTH

PHYSICIANS OF THIS COMMUNITY ARE MANIFESTING INCREASING INTEREST IN THE SUBJECT OF SCHOOL HEALTH. WITHIN THE FIELD OF PUBLIC HEALTH MENTIONED ON THIS PAGE ONE MONTH AGO, NO TOPIC IS OF GREATER IMPORTANCE THAN THAT WHICH CONCERNS THE HEALTH OF OUR YOUNGER CITIZENS--WHO WILL BE OUR MATURE CITIZENS A FEW YEARS FROM NOW.

THE SUBCOMMITTEE ON CHILD WELFARE IS BUSY GATHERING DATA CONCERNING PRESENT ACCOMPLISHMENTS AND UNMET NEEDS IN THE DISTRICT OF COLUMBIA. QUESTIONS FOR STUDY MAY INCLUDE: HOW OFTEN AND UNDER WHAT AUSPICES SHOULD THESE GROWING CHILDREN HAVE GENERAL PHYSICAL EXAMINATIONS? WHAT SORT OF FOLLOW-UP IS DESIRABLE? WHAT CORRELATIONS OF AUTHORITY ARE APPROPRIATE BETWEEN THE BOARD OF EDUCATION AND THE DEPARTMENT OF HEALTH, AND WHAT PART SHOULD VOLUNTARY EFFORTS PLAY? WHAT ARE THE BEST METHODS OF CONTROLLING SPREAD OF CONTAGIOUS DISEASE IN SCHOOLS? WHAT CONTRIBUTIONS CAN PHYSICIANS MAKE TO THE OVER-ALL PROGRAM?

Herbert P. Ramsey

Editorials

SOME PHASES OF PSYCHIATRIC THERAPY

With the growing interest in psychiatry, both among the general medical profession and the laity, much is heard about a variety of approaches to treatment of the emotionally disturbed patient. On the somatic side, for example, we hear of malarial or penicillin treatment of general paresis, "shock" therapies of various kinds (insulin and electroshock especially), vitamin and other treatments of the senile and arteriosclerotic, and the various forms of "psychosurgery."

On the psychologic side we hear of psychoanalysis and other forms of individual psychotherapy, group psychotherapy, and psychodrama. All these various forms have their place, more or less definitely agreed upon, in the treatment of the several types of psychiatric problems.

There are, however, other auxiliary types of treatment which are particularly applicable to psychiatric patients who are cared for in mental hospitals. Among these is art therapy—the use of various artistic media in giving mental patients a feeling of accomplishment and a means of expression. This form has been found very helpful at Saint Elizabeths Hospital, and at the exhibit at the Annual Scientific Assembly in October the members of the Society will have an opportunity to see the art productions of some of the patients. A significant feature, especially to the general practitioner and internist, is that the exhibit, prepared by Mr. Prentiss Taylor of the Saint Elizabeths Hospital staff, stresses the work of patients suffering from "organic" types of mental disturbance—cerebral palsy, mental deficiency, brain tumor, postencephalitic parkinsonism, arteriosclerosis, general paresis, and patients who have undergone lobotomy for various types of mental disorder.

There are pastels and water-colors, and although the works may not compare with Raphael's or Turner's, they exhibit a wide range of subjects and considerable content of interest. The members of the Society will, it is hoped, gather some new light on the accomplishments of the organically psychotic patient by viewing this exhibit.

W.O.

A MESSAGE FROM GEORGETOWN'S NEW DEAN

With the development of modern medicine to its present high level of efficiency and the rapid pace of gaining this knowledge it is essential that the medical profession maintain well-functioning lines of communication. This is especially true between physician and physician, and in many instances between physician and research institutions, particularly the medical schools. It is essential, therefore, that the medical schools coöperate closely with the medical profession, that is, the county and state medical societies—in Washington, the District Medical Society, which is a combination of both. The hearty coöperation of the faculty and administrative staff of Georgetown University School of Medicine with the District Medical Society has long

Opinions expressed in contributions to the Editorial Section are those of the writers and do not necessarily reflect the views of The Medical Society of the District of Columbia.

been so evident that it need not be stressed.

Because of the complexities of modern society in general and modern medicine in particular, it has become necessary for medical societies to extend and extrapolate their interests beyond those of the physician himself. Problems of social welfare and hospital service, insurance plans and individual medical care, are all the concern of the medical profession, and no part of the profession can overlook their obligations in this regard. Here particularly the medical schools must also assume moral responsibilities in policy-making and coöperate wholeheartedly with medical societies.

We at Georgetown are pledged to join with the faculties of our sister schools in the Washington Metropolitan Area in active participation in the broad field of health. During my administration this pledge will not only be honored; it will be intensified.

Francis M. Forster, M.D.
Dean, Georgetown University
School of Medicine

THE "RHUBARB" OVER THE A.M.E.F. ASSESSMENT

The recent mail ballot on the proposed voluntary assessment for the American Medical Education Foundation evoked considerable comment in addition to the straight yeas and nays. Of those ballots received a proportion of 2 to 1 voted in favor of the proposal.* The added commentaries on a number of the ballots gave evidence of considerable misunderstanding on both sides of the question in spite of the letters and circulars which had been sent out.

Let's Get the Main Points Cleared Up

First, it is not contemplated that anyone who is already donating to his or her medical school be assessed over and above that. For instance, many are contributing pledged amounts varying from $50 to $1,000 annually to their schools. Your committee wants them to send their gifts through the foundation for reasons set forth below but does not propose to bother them with an assessment.

The true purpose of the assessment is to put the medical community as solidly as possible behind the medical schools. It is not planned as an additional burden to one already freely assumed.

Second, there are several reasons for sending your larger donations through the A.M.E.F. For one, your gift is transmitted intact to the medical school of your choice without any deduction for expenses whatsoever. Further, full personal credit accrues to the donor, since his name is sent along with his contribution. And, most important of all, every additional dollar added to the medical fund helps that much to prove to the corporations that we M.D.'s are supporting this activity. Corporate donors are expected eventually to make up about four fifths of the total fund.

It is hoped that there will not be insistence that the amounts subscribed under a modest assessment, however voluntary, be earmarked for any particular school. On the other hand, this is to be encouraged in the case of the larger pledges. Again let us point out that such earmarked donations are paid over to the schools before distribution of the untagged residue.

All this has been said before and will be repeated until we get it across to the Society's members. The main points to remember are: (1) No medical student pays for more than half the cost of his training, and (2) it was done for you in your time.

Karl C. Corley, M.D.
Chairman, Committee on Medical
Education Fund

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* Final vote on voluntary assessment: 334 in favor, 143 opposed, total vote 477. The Medical Society's Executive Board did not consider this ballot representative and voted that funds should be sought by solicitation.

NATIONAL MEDICAL VETERANS SOCIETY

When I was requested by the Executive Secretary of our Society to write an editorial on the National Medical Veterans Society, I was very gratified. We are aware of some of the misconceptions in regard to our group; therefore, when I inquired of our national President, Dr. Henry S. Blake, of Topeka, Kansas, he asked me to express his appreciation to the Medical Society of the District of Columbia for this opportunity.

The National Medical Veterans Society, although less than a full year old, has already justified its existence in the medical communities of the Nation. This has been achieved by the fair play and constructive thinking of its members. The Society's activities have contributed in no small way to the welfare of all, veteran and nonveteran, engaged in the practice of medicine.

The National Medical Veterans Society was born on December 7, 1952, the eleventh anniversary of the Japanese attack on American forces at Pearl Harbor. On that day delegates from several independent physician-veterans' groups met in Toledo, Ohio. Dr. Kenneth McCarthy, of Toledo, Ohio, and Dr. Robert Green, of Cincinnati, Ohio, are to be credited with recognizing the need for and stimulating the organization of the group. Both of these men, veterans of several years of service in World War II, reflected the feelings of the veterans of our profession.

There was a definite need for organization on a national scale. This necessity was dramatically brought to the fore last November at the first conference in regard to the proposed extension of the Doctor Draft Law between Pentagon officials and the American Medical Association representatives. At this time, with priorities 1 and 2 almost exhausted, certain Pentagon officials suggested passing up the "older" physicians in priority 3 and, instead, calling up only the doctors under the age of 41, including the veterans of World War II.

The reasoning behind this move was quite obvious to the physicians who had previously served. Rather than the avowed need for experienced men, it would have resulted primarily in the recall of physicians of company grade (Captain and under), many of whom had served as much as 3 years in uniform during World War II. On the other hand, the new commissioning of priority 3 physicians in age groups even past 37 would call for the awarding of grades higher than those retained by men who had previously served. This attitude of the military admittedly served as the stimulating tonic required to awaken the veteran physician from his lethargy.

The meeting at Toledo was a quiet and modest one, attended by representatives of several states. Dr. McCarthy was elected president and a moderate policy was adopted.

There was no need for a vast membership drive. In virtually every state there already existed local groups, much like our own here in the District of Columbia. These men had organized immediately following World War II, since in virtually every community the veteran had found himself without available office space and automobiles, and in many areas was denied hospital privileges. It must be said, too, that in some cities they were virtually excluded from participation in their medical society activities. However, by 1947 the readjustment of the veteran to his just place in the community had been completed, and the independent groups remained organized largely for annual reunions or social get-togethers.

Therefore, organization of physician-veterans on a national scale was made easier. A thousand members a week joined the group until its total surpassed 20,000. This represented a considerable proportion of the veterans engaged in active practice, and our membership rolls are growing daily. The group is truly national in scope; its officers and steering committee consist of members from California, Washington, Texas, Kansas, Ohio, New York, and the District of Columbia. Its executive committee (analogous to the A. M. A. House of Delegates) has members from virtually all other states.

The objectives of the National Medical Veterans Society have been misinterpreted by many who have not yet engaged in military service. It is not our intention to "get" anyone into the service or to become a large pressure group. It is not our wish to become either a splinter group of the American Medical Association or a junior affiliate of this organization.

We believe that each physician physically and professionally qualified to serve his country should be given the opportunity. This privilege is set forth by legislation of the Congress, a discriminatory act, but one which became necessary when there were insufficient volunteers for the Korean conflict. In our representations before the Armed Forces Committee of both Houses, we testified in behalf of a fair "Doctor Draft" law for all physicians. For example, among other things, we vigorously requested that the ratio of physicians per thousand men be lowered to a more realistic level; that rank commensurate with professional age and experience be guaranteed; and that volunteers be accepted in the service of their choice. These items were included in the amendments to the law and all were of direct benefit to the priority 3 physicians. We were able to make these and other contributions only because of the knowledge and experience gained from our previous contact with the military.

Our policy is to confine our activities to those areas in which we believe we are best able to make a contribution. In outline, therefore:

1. We shall serve our country to our best ability in peace and in war. Our members served voluntarily in World War II and will not retreat from this duty if needed again.

2. We shall watch over the interests of all physicians who have previously served their country in uniform, including those in the Korean War.

3. We shall observe carefully the way in which medical manpower is utilized by the military services, and will make every effort to see that the physician in service is fairly treated. We will make appropriate recommendations so as to insure the best medical care for the American military man without wasting personnel otherwise available to our civilian population.

4. We shall aid physicians returning from military service in their relocation in practice, the obtaining of residencies, and in any similar capacity.

5. We shall take an active interest in the medical program of the Veterans Administration. No program is so perfect that it cannot be improved upon.

6. We are anxious to be of active service in the Civil Defense program. Our members have spent an average of 36 months in military service, and most have had experience in the handling of large numbers of battle casualties. These men know how to respond under fire, in emergency and in catastrophe. Their experience would be invaluable if a war were carried to our shores.

7. We shall make representation to the American Medical Association in those matters which pertain to these specific points. Our members all belong to the Association and we feel our voice should be heard in its councils.

8. We shall not participate in any activity in which we do not feel we have a particular qualification by virtue of previous military service.

In summary, therefore, we of the National Medical Veterans Society feel we have already been and will continue to be able to make a definite contribution to our profession. Our policy is straightforward, our intentions fair, our scope national, and our record American.

William B. Walsh, M.D.,
President-elect, National Medical Veterans Society

In and Out of Focus

BY THE OBSERVER

The Coming Assembly

While in general the Society's Annual Scientific Assemblies follow the same pattern, each possesses distinctive characteristics. New features and added refinements are noted by observing participants at succeeding Assemblies—evidence that satisfying progress is being made.

Long recognized as one of the best State Medical Society meetings in the country, the Assembly is taking on more of a regional character each year. Those most closely associated with the Assembly and those who have watched its development over a period of years are convinced that the possibilities for its growth have been far from fully realized.

Among the new features of the coming Assembly which will be of interest to physicians here and elsewhere are:

Participation in the Assembly of members of the following State Chapters of the American Academy of General Practitioners, i.e., District of Columbia, Maryland, Virginia, West Virginia, Delaware, Pennsylvania and North Carolina. AAGP's Committee on Postgraduate Education has approved the Assembly for postgraduate training of its members, and the above Chapters have concurred. Up to 18 credit hours will be given members for attendance at scientific sessions.

A dinner, which will be given for doctors' office assistants, in the Presidential Ballroom of the Hotel Statler, Tuesday evening, October 6. The program includes Dr. W. W. Bauer, Director of Public Health Education of the American Medical Association, who will be the principal speaker; and possibly the AMA's President, Dr. Edward J. McCormick, who intends to make every effort to be present. Dr. McCormick will speak at the Society's Annual Dinner on the following night. Music at the doctors' office assistants' dinner will be furnished by talented physicians. Members of the Society will be requested to buy dinner tickets for their employees.

A 3-D scientific motion picture will have its initial showing in Washington at the Assembly. Nationally, it will be the second showing of this film. Producers of the film are Chas. Pfizer & Co., Inc. The picture will be run every half hour and on the hour in the Massachusetts Room at the Hotel Statler.

The Public Health Exhibit has long been a feature of the Assembly. However, this year it will be double in size, thanks to contributions toward its support from a number of official and voluntary health organizations and the People's Drugstores.

When, in addition to these and other features, the general excellence of the scientific program and exhibits are considered, members can ill afford to miss this year's Assembly. While physicians always encounter some difficulty in attending medical meetings in their home communities, it can be done without too much inconvenience if patients' appointments are so arranged as to make regular attendance possible.

A special attraction for Washington doctors should be the attendance of many out-of-town physicians. This will offer an unusual opportunity to show them what fine hosts the medical profession here can be and to enlighten them in regard to the District as a medical center.

Now, if you will turn to the insert section of the Medical Annals, you will find the complete story of the Assembly.

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"...Two Classess of Citizens..."

It has seemed paradoxical to your Observer that foreign medical graduates who cannot be licensed in the District of Columbia because the medical schools from which they graduated are not approved by the AMA's Council on Medical Education and Hospitals, are nevertheless acceptable to our hospitals as interns and residents. However, there is a valid, although not particularly satisfying, explanation for this situation.

The Commission on Licensure for the District of Columbia has taken the position that definite standards must be adhered to, and the Council's list of approved medical schools has long been considered a reliable guide for medical examining boards throughout the country. No one can quarrel with this, as many foreign graduates come from countries behind the Iron Curtain where little or nothing can be learned about the standards adhered to by medical schools. In some Western countries, e.g., Germany, medical schools deteriorated sadly during the recent war. Despite this state of affairs, quite a few of the graduates from these schools have acquired a sound medical training and have shown unusual aptitude for the practice of medicine. Their plight is not only regrettable but often tragic.

However, when one considers the situation in New York State described by Dr. Willard C. Rappleye, Dean of the Faculty of Medicine of Columbia University, in his report to the Faculty for the academic year ending June 30, 1953, it is apparent that one should go slowly in endeavouring to correct the situation as it exists in the District of Columbia.

"At the present time," Dr. Rappleye states, "there are approximately 1,700 approved internships and 3,940 approved residencies in the State of New York. In view of the fact that about one sixth of the approved internships and approximately one fifth of all of the residencies in the United States are in New York State, a recent action by its legislature is of national as well as of local significance. As of July 1, 1953, the educational requirements for internship, which have been a part of the present state education law for many years although not enforced, will be repealed. A new law will permit all hospitals to appoint interns without regard to their educational qualifications and many hospitals to appoint residents under the same condition. The state intends to solve the problems of staffing the hospitals by abdicating essential standards which it had adopted in the past. Some of the extravagant statements and dire predictions by the advocates of legal recognition of lower standards merely reflect their unwillingness or inability to come to grips with this vital question. There are approximately 1,000 graduates from unapproved medical schools now serving in the hospitals of the State of New York. The employment of hospital staffs which do not meet the professional requirements recognized throughout the country, and even perhaps by the courts of the state, may introduce a number of interesting and serious consequences to the hospitals that employ such staffs should those institutions be sued for malpractice or damages.

"Those who have advocated and secured the passage of legislation specifically repealing the qualifications for internship and weakening those of residency training have done so on the allegation that by so doing the hospitals of the state would be made available for the education of foreign physicians. Reference is made to the desire to 'equalize the education of the foreign graduate' and capitalize on his broad interest in 'postgraduate medical education.' It is difficult, however, to understand how it is possible to compensate for the inadequate preparation of many of these graduates from medical schools which are below acceptable standards by placing them in 'postgraduate training' in hospitals that provide practically no training program.

"It is all too obvious that the device is essentially a method of securing house staffs for hospitals that are not otherwise able to attract graduates of approved schools. It is equally clear that there is no intention to conduct these internships on an educational basis. Some other term should be used for the employment of these individuals than 'interns' or 'residents.'

"In the United States the internship has come to be accepted universally as an essential part of the preparation of the physician. It is a requirement for licensure in no less than twenty-seven states and most territories. The residency plan has been accepted everywhere as the basis of true graduate medical training. To use these two important designations, which are accepted generally as a part of the educational pattern of American medicine, as a lure for the recruitment of large numbers of untrained or incompetent individuals is likely to discredit the entire effort to maintain professional standards in this country.

"Those who sponsored the legislation in New York maintain that the standards are not lowered. It seems to be evident now that the standards are not reduced; they are merely eliminated. A recent announcement of the new program states that it will permit 'interns who are generally under close supervision to come from any source.' Nothing could be more misleading in many instances than to speak of 'close supervision.' The important phrase is 'from any source.'

"Serious damage may be done to international good will through those who come here with the impression that they will obtain graduate medical training, which, when under the proper auspices in this country, is unequaled in the world. Fortunately, for international relations, very few of the foreign physicians intend to return to their own countries. Hence, the false and pious claims of educating them in hospitals which offer no instructional plan will not have too serious an adverse effect on international relations.

"The following recommendations were made in a recent statement by the Assistant Commissioner for Professional Education and the Secretary of the New York State Board of Medical Examiners:

" 'Since a large percentage of all foreign medical graduates desire to be licensed in New York, the following suggestions are offered to hospital administrators and chairmen of intern committees for assisting foreign medical graduates to establish eligibility for admission to the medical licensing examinations in the State of New York:

" 'Advise all Continental European doctors who graduated between 1939–1950 that their medical education is considered unapproved, except university graduates of Great Britain. (Others have been added since the publication of the advice.)

" 'Advise all Latin and South American graduates that their education is unapproved, regardless of the time of graduation.

" 'Advise all Asiatic graduates, except from the University of the Philippines, that their medical education is unapproved, regardless of the time of graduation.'

"In spite of the admonitions of the educational authorities, the State has officially made it easier than ever for the graduates of those very schools which do not meet the approval of the authorities to enter the hospitals of the community.

"It is likely that next year there will be as many graduates from foreign schools seeking admission to the hospitals of New York as will be graduated from the nine medical schools of the state.

"We are rapidly creating two classes of citizens in the State of New York in terms of medical care received. Those of the first class will be attended to by graduates of approved medical schools; those of the second class will receive medical care under the internship and residency program largely by graduates of unrecognized medical schools.

"The new law of the State of New York also requires that an American who is a graduate of an approved medical school and is serving as a hospital resident in a voluntary hospital must have either a permanent or a temporary license to practice medicine in the state. On the other hand, aliens from unapproved medical schools and the residents of all municipal and state hospitals, many of which have little or no training programs, will be specifically exempted by the law from the license requirement. The legislation gives preferential treatment to aliens who are graduates of unapproved medical schools from every part of the world.

"New York has taken an easy short cut to meet an immediate and difficult situation in some of the hospitals. Following the course of least resistance is a surrender to mediocrity and, in the long run, is no solution at all. Many of the hospitals are obviously having difficulties securing a house staff and every constructive effort should be made to help solve the problem, but no solution that would destroy the worthwhile educational plan that has been developed during recent years should be advocated. It would be far wiser to find a solution to the present dilemna with some other device than a camouflage.

"The situation now developing is of considerable concern for the present but its implications for the next decade or two are serious because the state, in fact, is permitting and actually encouraging conditions that will lead to a lower level of medical practice during the next generation. The price of maintaining proper objectives is eternal vigilance and courage. Under the new legislation, we must recognize early signs of deterioration in medical services in New York, a state which has long been a leader in maintaining educational standards."

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Colorful Personalities

In an unusually frank editorial, "Unwarranted Attack," which appeared in its June issue, *Medical Economics* came to the defense of Dr. Paul Magnuson, who has been under fire of the medical profession ever since he became Chairman of President Truman's Commission on the Health Needs of the Nation. ME points out that only a few years ago Dr. Magnuson as Chief Medical Director of the Veterans Administration was "one of private medicine's special heroes" because he refused to let the bureaucrats take over VA's medical program. His stand cost him his job, but he had won many ardent friends among the medical profession.

When he accepted President Truman's appointment, it was a different story. Despite repeated assurances that his acceptance of the new assignment was on the condition that he would be permitted to do "a nonpolitical job," "neither his good intentions nor his known distaste for bureaucracy kept him from being tarred and feathered by his own profession." Recalled my ME was the 1952 meeting of the AMA's House of Delegates, when Dr. Magnuson was described as an "unwitting captive of the forces of socialization."

ME protests this treatment, because, it says, "facts simply show that:

1. Magnuson agreed to head a President's Commission investigating the health needs of the Nation; that

2. Working against a tight deadline, this Commission made a lot of recommendations, including some we don't agree with; and that

3. A number of physicians now seem to think that Magnuson is bent on sabotaging the profession."

It is not your Observer's purpose to enter into a discussion of the merits or demerits of Dr. Magnuson's activities as head of the Truman Commission. He is concerned, in these comments, only with the man himself.

In your Observer's opinion, Dr. Magnuson stands out from his fellows as an unusually courageous physician. Few could or would have stood up to the severe criticism directed at him, even by his close professional friends. Lesser individuals would have beaten a hasty retreat when they discovered that they were courting the displeasure of those upon whom they counted for support.

But Dr. Magnuson is not so constituted that he can compromise where his beliefs are concerned. Opposition merely makes him more determined to hold fast to his views. This characteristic would be a handicap to an ordinary man, but Dr. Magnuson is not ordinary. For, in addition to his courage and unusual ability as a physician, he possesses that indefinable attribute, a colorful personality. It is this which sets him apart from most of his professional colleagues and which caused your Observer to reflect upon the colorful and often controversial figures in medicine he has known over the years.

Even those violently in disagreement with Dr. Morris Fishbein's views on the economic and social problems of medicine—and there are many who are—admit his extraordinary capabilities as a medical journalist and his unique personality. He has the flair for the spectacular, which captures the imagination. You may not like him but you cannot ignore him, for he possesses that indefinable quality—color.

Dr. Paul R. Hawley is another example. As Director of the American College of Surgeons, he has recently become the center of a rather stormy controversy. Ordinarily a modest, pleasant man, his frank comments on the shortcomings of physicians have aroused the ire, especially, of general practitioners. Exasperating to many has been the disarming manner in which he levels his charges. Nevertheless, even among his severest critics, those who know him personally cannot honestly deny that Dr. Hawley possesses qualities which add up to a colorful personality.

There are, of course, unusually attractive personalities who have not figured in controversies. Your Observer recalls many of them. But usually they lack the glamor of the more combative individual. Such is the perversity of human nature, that we enthusiastically applaud or condemn the fearless who, by their flair for the spectacular, cannot be ignored.

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Shop Talk in Britain

A long-hoped-for opportunity to visit Great Britain was realized by your Observer last July. He had no business to transact in that country, as this was strictly a vacation and he was resolved to leave matters of a medical nature behind. But, like so many resolutions, this one was not kept. He could not refrain from engaging in shop talk—this time, except in one instance, with people having no connection with the medical profession and whom he met casually in his travels around the country.

Of each of his "victims" he asked this question: "What do you think of the National Health Service?" or, "Are you satisfied with the medical service you receive through National Health Service?" He was careful to state his occupation, that he was not seeking to convince anyone of his views, and that he desired honest opinions. In no instance was there reluctance to answer his questions; in fact, your Observer has good reason to believe that all of the individuals with whom he spoke were completely frank.

Among those who stand out in his recollection is a British railway employee, an Inspector, whom he met on the platform of Paddington Station in London just before his train pulled out. A middle-aged, obviously intelligent and rather handsome man, he responded to your Observer's inquiry by saying:

"You know, you shouldn't ask me that question because I'm afraid you will not get the answer you would like. I am a member of the Socialist Party from R——" (a city near London). The Health Service, he said, was in its infancy and he was certain that its defects would be remedied in time. Among the defects, he deplored the demands made on general practitioners by many people not in need of medical care. He cited his own physician as an example. Often, when he returned home late at night, the lights were still burning in the doctor's office. Being a close friend of the doctor, the Inspector learned firsthand how impossible it was for him to practice his profession as he should. The cost of operating the Health Service had also skyrocketed because of the growing demands among patients for both services and drugs. The Inspector said he had seen too many people returning home with large supplies of drugs which they could not possibly use. Finally, he remarked on the paper work of the general practitioners as adding unnecessarily to their burdens. But in spite of these and other shortcomings, he insisted that the Service would some day become what he and many who thought the same way had hoped for.

By coincidence, it was on the train leaving Paddington Station that your Observer stimulated a discussion which generated some heat. A young British soldier had attracted his attention in the dining car. He obviously wished to enter into a conversation, but as he sat across the aisle, it was rather awkward. Later, however, your Observer happened by his compartment and dropped in. It developed that the soldier had been an Oxford student and that his family had considerable means. Your Observer asked the usual questions. "No," he said, "my family does not use the Service. We employ private physicians." Nevertheless, he felt that the Health Service, despite its imperfections, was good for the people of England. He agreed that, at the present time, quality was being sacrificed for quantity, but this, he felt certain, would be improved.

In the midst of the discussion, a tall, attractive, middle-aged woman entered the compartment. She, your Observer learned later, had an unusual vocation—she was a judge at dog-shows—and had traveled widely, once to Madison Square Garden in New York. She entered spiritedly into the conversation. "The Health Service is the worst thing that has happened to England," she said. She related personal experiences as evidence of the deterioration of medical service since the Government had taken over. Physicians, she insisted, were no longer as interested in patients as they were previously. She tried, with little success, to convince the young soldier that his views were immature and were due to his youth and inexperience. The soldier asserted that the Health Service was part of a social development which was inevitable in modern society.

While waiting in the Victoria Bus Station for transportation to the airport, your Observer talked with a Scotsman who was an advertising agent. His sister and brother-in-law with a young child were also waiting for transportation. No, they didn't like the Service—too impersonal, they said. Doctors didn't care about people as they used to. Furthermore, they paid more in taxes for the Service than they would in fees if there were a private system of medical care.

These samples are pretty much of a pattern. As expected, there were people for and against National Health Service, but the majority seemed to feel that the Service was a good thing, and that, in time, its defects would be remedied.

Your Observer does not pretend that these random conversations on a hasty trip through Britain justify any conclusions. They have some significance, of course, the most important being that, despite the obvious shortcomings of the National Health Service, medical care of the people is now an accepted function of the Government. In other words, Britain's Health Service is here to stay. It may be altered in many ways, but it is now an integral and permanent part of the country's social program.

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". . . a Minimal Quota of Sin . . ."

In our more philosophical moments, we have few misgivings about old age. After all, it is something that comes to all of us and, each age, we reassure ourselves, has its compensations. There are other times when old age is not a pleasant prospect. Particularly distressing is the thought of incapacity, which would make it impossible for us to carry on a reasonably normal existence.

Fortunately, medical science has found a number of ways to ease the physical and mental burdens of the aged. Degenerative diseases, by the very nature of things, will of course continue to take their toll. But remarkable progress has been made in alleviating, if not curing, some of the most disabling diseases which affect old people.

The understanding physician is only too keenly aware of the limitations of the tools at his disposal. He is aware that inheritance is an important factor in assuring a healthy old age; that minor "vices" may contribute to an individual's comfort and happiness without jeopardizing a reasonably long life. Dr. Russell L. Cecil of New York City is an eloquent advocate of the latter point of view. In an address, "Old Age and the Vices," he comes up with some comforting observations to oldsters:

> "Old age, even when asymptomatic, has comparatively few compensations. The most important of these is probably the leisure which comes to us after years of preoccupation with business and professional duties, the leisure which enables one to do so many things that he has always dreamed of doing but never seemed to get around to doing. Time marches on even for the aged, but there is more of it available for pleasant indulgences. There is time for reading and meditation, time for travel, time for recreation and sport, time for the sheer enjoyment of friends and family. However, one can't read and meditate *all* the time! There must be other interesting and even adventurous digressions. And here is where the more innocuous vices come into the picture, as distinguished from the really reprehensible ones such as lying, stealing, avarice, etc. The vices to which I refer come within the ken of medical practice and for that reason have a special interest to physicians. In their mildest manifestations they are more properly referred to as habits. A man who smokes two cigars a day or who has a cocktail every night before dinner might very naturally resent such comparatively innocent pastimes being labeled as vices.
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> "These habits, or vices of the flesh, so to speak, when practised in moderation, afford much diversion and pleasure to human beings of all ages and usually are passed over without censure in the taking of medical histories. Modest addiction to alcohol and tobacco, a vigorous appetite, even an occasional sleeping tablet, are recorded without comment by the average physician.
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> "Of the casual vices which I wish to discuss briefly in relation to old age, perhaps alcohol is the most important. It is generally agreed that while alcohol is not contraindicated in the aged, the tolerance for it diminishes in the later decades of life. Chen has shown experimentally that the average lethal dose of alcohol as determined in a large number of mice is inversely proportional to their age. What's bad for old mice must be bad for old men!
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> "In the aged the gastric mucosa is not quite so receptive to dry martinis; the head seems a little heavier the morning after! The vast majority of old people will soon realize that temperance is the best policy and gradually reduce their daily intake to the point where no unpleasant effects are produced.
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> "The complete elimination of alcohol is rarely necessary in the aged and may do more harm than good even when some of the degenerative processes have made their appearance. The hypertensive, the chronic nephritic and the diabetic can safely take their daily nip in moderation. The majority of physicians allow the elderly gout patient a modest portion of whiskey, forbidding wine and the various malt drinks.
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> "We have all been taught to administer alcohol as a therapeutic agent in coronary disease. Nothing quite equals it as a vasodilator. Alcohol relieves the anginal

pain of coronary insufficiency and sclerosis, allowing more blood to reach the ischemic heart muscle. Its beneficial effect in intermittent claudication and thromboangiitis obliterans is so well known as to need no comment. It would seem quite likely that part at least of the comfort which the very old derive from a drink is due to the improved vascularity of various organs and tissues resulting from local effect of alcohol on the vessel walls.

"There is small danger of an elderly man or woman becoming an alcoholic unless the habit of drinking has existed for many years previously. The teetotaler or even the moderate drinker practically never drinks to excess in old age.

"In the avitaminosis of the aged, alcohol may interfere to some extent in the absorption or utilization of some of the vitamin B group and this should ever be kept in mind by the physician. All old people should probably have a vitamin supplement capsule daily, but this form of therapy is essential for those who have two or three drinks of alcohol every day.

"Several studies have appeared in medical literature which would seem to incriminate tobacco as a causal factor in the etiology of bronchiogenic cancer of the lung. Ernest Wynder and Evarts Graham found that excessive and prolonged use of tobacco, especially cigarettes, seemed to be an important factor in the induction of bronchiogenic carcinoma of the lung in the male. In nonsmokers, cancer of the lung was a rare phenomenon (only 2 per cent). Among 605 men with bronchiogenic carcinoma, 96.5 per cent had been heavy smokers for many years, compared with 73.7 per cent among the general male population without cancer.

"In spite of these various objectionable manifestations of tobacco on the human machine, I still favor the moderate use of tobacco for the aged, if no obvious harm results from its use. Like alcohol, it constitutes one of few pleasures available for the aging patient.

"We now come to vice number three, sleeping tablets or, more properly speaking, hypnotics. I don't know that any satisfactory explanation has ever been found for the prevalence of insomnia in the aged but certainly it is remarkably common in old people and contributes not a little to their unhappiness. To counteract this unpleasant symptom, various drugs have been used, but by far the most popular at the present time are the barbiturates.

"Just how injurious are the various barbiturate preparations if taken nightly through the months and years of senescence? No one can question the propriety of an occasional capsule of phenobarbital, amytal or seconal, but how about one or two every night month after month and year after year?

"First, I should like to say that so-called barbiturate addiction is a misnomer. Ordinarily there is no craving when barbiturates are suddenly withdrawn, even in patients who have used these drugs for a long time. In the second place, a tolerance for the barbiturates is rarely established, as is so frequently the case with many other drugs. The same dose will be effective for an indefinite period. In my opinion, there is too much apprehension and fear of the barbiturates by both physicians and laymen. They do not affect the mind or intelligence of old people unless taken in doses so large that drowsiness is induced during the day following.

"I have much sympathy for the aged who are denied or who deny themselves the solace of barbiturates, through fear of addiction or some other injurious side-effect. As the poet has said, 'Sleep is a blessed thing,' and old folk are entitled to their share of it. Those who suffer from intractible insomnia should have 50 or 100 mg. of one of the quick-acting barbiturates every night just as long as they need it, and that may be for a long time.

"Gluttony, or in more polite language, overeating, is vice number four. It accounts largely for the prevalence of obesity in the aged, especially in elderly women. The vicious circle is physical inactivity plus a high caloric intake. People who are idle become physically lazy and often eat or drink from sheer boredom. This compulsion to eat is much stressed by the psychiatrists, and it may play a large part in the development of obesity at any age.

"Obesity introduces many hazards. It places an extra burden on the aging heart; it limits one's physical activities; and it certainly is the commonest predisposing cause of diabetes and osteoarthritis in the elderly patient. Finally, and perhaps more important, are the Life Insurance Company's statistics which show without question the role which obesity plays in life expectancy. In summary then I would say, let the old people eat what they like and can digest as long as they watch the ever important weight curve.

"Overwork is hardly an important vice in the aged unless coupled with worry. Osler used to say that he had never seen anyone die from mere overwork. . . .

"At the opposite pole from overwork is idleness, and this too is a vice which many elderly people enjoy without any apparent harm to their general health. Those who spend their winters in Florida must be impressed by the sight of thousands of elderly men and women sitting idly in the sun along the miles of Florida beaches, or reclining lazily under the palms beside their faithful trailers. The picture is a pleasant one of people who have worked hard all their lives, finally discovering peace and contentment beneath the warm friendly skies of the sub-tropics. Surely this is no vice to be censured by the medical profession! However, every physician has aged patients who are literally bored to death by idleness, energetic people whose zest for work has not been quenched by the years, and who desire nothing so much as an interesting and absorbing job. . . . Every human being likes to feel that he is doing something worth while and important in the world. An outstanding executive suddenly finds himself at home or in his club with no duties or responsibilities, with none of his old associates about him, not even a secretary into whose calloused ear he can pour his most trivial tribulations! Something happens to his ego and this something may prove to be very essential to his health and happiness.

"Sexual indulgence can hardly be called a vice unless carried to excess. For obvious reasons this rarely happens in the aged. . . ."

Dr. Cecil concludes with the observation that "his own vices are now largely condensed into that happy hour just before dinner when two cocktails and *only* two cigarettes are eagerly accepted as a reward for the day's labors, and that he expects to hold on to this minimal quota of sin for just as many years as the machine keeps running!"

T. W.

A BOARD OF HEALTH PROPOSED FOR THE DISTRICT OF COLUMBIA*

Mr. President and Members of the Board of Commissioners of the District of Columbia:

My appearance and statement are made on behalf of the Executive Committee, D. C. Survey of Medical Care for the Indigent and Related Services. We appreciate this opportunity to appear before you again to testify in support of a policy-forming Board of Health as against merely a Public Health Advisory Council to the Department of Public Health of the District of Columbia.

During 1952 and part of 1953, a survey was made on the medical care for the indigent and related services. This survey was conducted through the efforts of more than 200 individuals in the District of Columbia, assisted by 15 public health personnel loaned by the Surgeon General of the U. S. Public Health Service. The director of the survey was Dr. Edward T. Thompson of the U. S. Public Health Service, a member of that organization for many years. The chairman of the survey group was Mr. William E. Leahy, Washington attorney. The survey led to 165 recommendations for improvement in the operation of the Health Department of the District of Columbia and in the care of the indigent sick. One of the main recommendations was that a Board of Health be established by law which should have the authority to make policies and regulations for the Health Department and to select the health officer when such a need arises, with the approval of the Commissioners.

Reorganization Plan No. 5 of 1952 of the governmental departments and agencies of the District of Columbia stated that there should be no boards heading up any of the departments or divisions thereof. It is our belief that this principle is not in the best interest of the District of Columbia as far as its public health program is concerned. The District of Columbia is different from all other political units, in that its inhabitants have no vote. Since a nonrepresentative form of government exists, to have a major department such as the Department of Health without a board results in even less representation.

Large business firms operate with a board of directors. And running the D. C. Department of Public Health is big business. It spends millions of dollars of the taxpayers, who are in essence stockholders. The only important way in which the taxpayers have a say as to how their money is spent is through boards which may formulate policy and make regulations.

The reorganization of the District of Columbia Government contemplates a Public Health Advisory Council for the Health Department. Too often, advisory committees or councils are ineffective, in that they may not be used properly or tend to become a "rubber stamp." If their views are at odds with those of the director of a department they may be disregarded with impunity. It would be difficult to get qualified citizens to give the necessary time and thought on advisory councils if they eventually come to believe that their time and efforts have been wasted.

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* Statement of the Executive Committee, District of Columbia Survey of Medical Care for the Indigent and Related Services, presented by Dr. William P. Herbst at a Public Hearing before the Board of Commissioners of the District of Columbia, July 21, 1953.

There are many reasons for the establishment of a Board of Health for the District of Columbia. The recent survey is the sixth conducted for similar purposes over the last 25 years, and so far as can be determined, very few of the recommendations of any of these surveys have been carried out. The inefficiencies pointed out by the recent survey have been known, without question, to the Health Department for many years, but the same recommendations are still being made. It has been stated by Health Department officials that the reason for this is that existing laws and regulations will not permit action. This fact alone is a powerful argument for a Board of Health which could work vigorously for changes in laws and regulations for the betterment of the activities of the Health Department. The Board of Health could be a champion of the Director of Public Health. Also, the affairs of the Health Department involve coöperation with other official and voluntary agencies including hospitals. The Department is not self-contained. No one man alone can bring about this coöperation. It requires informed, interested and energetic citizens of the community, both professional and lay, working in close collaboration with the Health Department to bring about such coöperation. The tendency has been, however, to concentrate all activities into a bureaucratic organization.

The activities of the Health Department of a municipality of this size are numerous and complicated. They involve not only public health measures, for which health officers are trained, but the care of the sick, for which health officers are not primarily trained. Help is needed, therefore, from various elements of the community, both professional and lay, to bring about the best results in the affairs of the Health Department.

It is believed that a properly constituted Board of Health can bring about greater efficiency and a better return for dollars expended. There are many examples which could be given in this connection.

The statement has been made that the creation of such a Board of Health would take away from the Commissioners their powers with reference to the Health Department. It is recognized that the Commissioners are by law responsible for administering the affairs of the District of Columbia. The proposal for the establishment of a Department of Public Health and the creation by law of a Board of Health, which is policy-forming, in no way removes such authority from the Commissioners. The Commissioners would appoint the members of the Board of Health upon nomination from the several community organizations that know qualified people in the various categories the best. The Commissioners would appoint the Director of Public Health upon recommendation of the Board of Health. Any changes in major policies would be subject to approval by the Commissioners. The budget of the Health Department as developed by the Board of Health and Director of Public Health would have to be considered and approved by the Commissioners.

In view of the myriad demands made upon the Board of Commissioners for their time and attention and the pressures which preclude the possibility of devoting as much time as they would wish to the separate agencies of government, it would seem that a Board of Health as herein proposed could be of inestimable value and help to the Commissioners in discharging their responsibility to the community. Furthermore, there is nothing in this proposal which would supplant the Director of Public Health. He would continue to be the executive officer of the Department of Public Health and responsible for day-to-day operation. A Board of Health would assist the Director of Public Health and serve as an avenue of approach from him to the Commissioners.

The District of Columbia is much more like a state than a municipality in regard to organization. This point has been stressed throughout the reorganization documents, but when it has come to the question of a Board of Health those not so interested in having one have indicated that this is a municipality and that not all municipalities have boards of health. However, 46 of the 48 states of the United States have Boards of Health and their regulations go down to the various political units of the state and may be transferred in many instances to local health departments, boards of health, and health officers. The Board of Health may make regulations and establish policies, but the Health Officer or Director of Public Health runs the department. To quote from *Public Health Reports*[1]*:* "The majority of states have statutory provisions granting both state and local boards of health the power to make rules and regulations, and in about half the states both types of boards of health may also issue orders." To quote again from Public Health Service Publication, No. 184, Part I, published in 1950[2], entitled, "Distribution of Health Services in the Structure of State Government":

> "Functions of the State Board of Health vary from those which are solely advisory to those which are completely regulatory, including the exercise of executive and police powers for enforcement of all state laws pertaining to public health. The most usual duties are identified with the determination of Health Department policy and the promulgation of rules and sanitary codes. Occasionally, the Board of Health has appointive authority, although it is more apt to be empowered only to prescribe qualifications and/or to approve appointments which have been made by the Health Officer. Three states—Idaho, Missouri and Nebraska—[Note: In 1953 Nebraska created a State Board of Health]. . . have no Board of Health; neither has Puerto Rico nor the Virgin Islands. . . . The number of Board members varies from 5 to 14 in the several states with 8 members as the median number."

In regard to the Chief Executive Officer, known otherwise as the Health Officer or the Director of Public Health, quoting again from the same publication:

> "Summary of the data presented in Table III shows that the Health Officers of 24 states and Alaska are appointed by the State Board of Health, while those of 23 states, Hawaii and Puerto Rico are appointed by the Governor."

A little further in the same section:

> "In four states where appointments are made by the Board of Health, the approval of the Governor is required and in another the State Medical Association must approve the selection."

Quoting further:

> "The amount of independence permitted a State Health Officer in discharging his responsibilities varies, although in most states he has authority to execute and enforce all laws, rules and regulations pertaining to the public health and to act as a direct agent of the Board, performing all of its duties when this body is not in session. As administrative head of the State Health Department he directs, plans or supervises all activities of the Department and sees that the health laws on sanitary code are carried out."

The article states further:

> "Contingent upon the amount of activity of the State Board of Health, he prepares rules and regulations for adoption, or at least makes recommendations to the policy-forming group. . . . In most states the internal organization of the department can be changed through action of the State Health Officer or Board of Health without legislative action."

In regard to Boards of Health and local Boards of Health in particular, we would quote from another Public Health Report[3]:

> "State Health Officers, when asked to comment on the advisability of local Boards of Health, almost unanimously expressed the opinion that such a body should exist, but expressions as to its function varied widely. Three State Health Officers questioned the desirability of a local board, seven felt it should function as an advisory body only, while thirty-three felt that it should serve as a policy-making body through the adoption of rules and regulations."

The Health Department is one of the fundamental divisions of city government, as well as state.[4-7] The people expect the Health Department to give leadership and direction in the protection and promotion of health. They look to it as the community agency which will help find the answers to their pressing health problems. It should be ready, willing and competent to step in and take some positive action wherever a health problem exists and is being neglected. This approach is not one of unlimited expansion. Public health should continue to be subject to social controls which will effectively prescribe areas of responsibility and must adapt itself to the will of the community. The most satisfactory type of city health department organization, according to Public Health authorities, as has been shown repeatedly, is the Board of Health plan. Members of the Board, appointed by the executive head of the government, should be representative citizens, professional and lay, interested in public affairs and familiar with the general principles of public health and the care of the sick. The major functions of the Board are:

1. Determination of the general policies of the department. This includes approval of the budget.
2. Promulgation of rules and regulations deemed advisable for the community.
3. Holding of hearings in regard to certain matters relating to the public health.
4. Nomination of the health officer when a new one must be appointed, the final approval to be given by the head or heads of the government unit.

The Board of Health meets at regular intervals, usually once each month, or during emergencies at the call of the Health Officer. The Board of Health elects its own chairman.

The advantages of a policy-making Board of Health, which is representative of the various interests and points of view of the community, are as follows:

1. Brings strength and protection to the Health Officer, who is responsible to the Board.

2. Gives community protection by giving it representation in the right way.

3. Develops policies with full understanding of the opinions and preferences of those most directly concerned.

4. Makes it therefore possible for policies to be more realistic and acceptable and therefore more easily enforced.

5. Brings out into the open and gives a fair opportunity to be heard those opinions that tend to be hidden or overlooked.

6. Provides a more democratic procedure.

7. Protects the Health Officer from any legal involvements by virtue of its delegate responsibility.

8. Provides for continuity of community-public health thought, direction and action from one political administration to another, or when a change of Health Officer occurs, through the use of overlapping terms of membership on the Board.

The Medical Society of the District of Columbia has endorsed the principle of a Board of Health for the District of Columbia. The Committee on Municipal Hospitals, appointed to advise Commissioner Camalier, on June 12, 1953 endorsed a Board of Health with the functions as recommended by the survey group, with the statement: "We feel that in this way close liaison between the Health Department and the community and the practicing physicians can be promoted more efficiently than by any other system."

For all these reasons, serious consideration of the creation of a Board of Health for the Health Department of the District of Columbia is urged. A Board of Health, acting as a liaison between the Health Officer and the Health Department and other health organizations in the community, can bring about such improvements and greater return for tax monies expended as can be accomplished by the fulfillment of the 165 recommendations of the recent Survey of Medical Care for the Indigent and Related Services. A properly selected Board of Health with broad powers can do a much better job than an advisory council, because members of such a board would realize their responsibility and feel that their time and efforts are not wasted.

If both the Board of Education and the Board of Public Welfare are retained in this reorganization, which should be done, there is no valid reason why a Board of Health should not be established. If a Public Health Advisory Council is set up instead, it should be considered as a temporary measure until the Commissioners and Congress can be convinced that a Board of Health should be established.

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WOMAN'S AUXILIARY NOTES

The Woman's Auxiliary to the Medical Society of the District of Columbia is beginning its twenty-ninth year with anticipation and enthusiatic determination to round out another season of worthwhile accomplishments. Currently the Auxiliary is under the guidance of:

Officers

President: Mrs. Richard H. Todd
President-elect: Mrs. Duane C. Richtmeyer
First Vice President: Mrs. Albert E. Marland
Second Vice President: Mrs. G. Louis Weller, Jr.
Treasurer: Mrs. E. Herbert Bauersfeld
Assistant Treasurer: Mrs. Hugh O. House
Recording Secretary: Mrs. David M. Nolan
Assistant Recording Secretary: Mrs. Leonard T. Peterson
Corresponding Secretary: Mrs. Ashby W. Smith
Assistant Corresponding Secretary: Mrs. Joseph H. Watson

Committee Chairmen

Program: Mrs. Samuel A. Alexander
Social: Mrs. James H. Scully
Ways and Means: Mrs. A. Magruder MacDonald
Public Relations: Mrs. Jaye Grollman
Nurses Education: Mrs. J. Blaine Harrell
Philanthropic: Mrs. J. Ogle Warfield
Legislation: Mrs. William F. Burdick
Today's Health: Mrs. Howard A. Donald
Publicity: Mrs. Charles W. Tegge
Advisory: Mrs. Lawrence A. Rapee
House: Mrs. I. Phillips Frohman
Membership: Mrs. Jonathan M. Williams
Parliamentarian: Mrs. Edgar E. Quayle
Historian: Mrs. Ernest E. Hadley

Plans for new projects this year include a Health Poster Contest for children in the public schools of the District of Columbia. In the state of Pennsylvania such a project proved one of the most valuable contacts between the medical profession and the general public. The groundwork has been laid and it is hoped that it will be authorized at our first fall meeting so that the publicity and activity can start rolling. Someone has suggested an art exhibit or hobby show. Upon investigation we were surprised to find how much real artistic talent is hidden in our midst. It is too good to hide any longer, so we are looking forward to an art exhibit in the Medical Society's building sometime after Christmas. The winning health posters can be on display at the same time, giving our art show a civic appeal.

Of course a list of projected activities would not be complete without mentioning our Nurses Scholarship Fund which now is sufficient to give assistance to six nurses, with additional funds in the offing when there are more requests from worthy applicants. Our donations to local charities will continue as heretofore; we also hope to raise funds for the important American Medical Education Foundation.

The need for a thorough medical news analysis has been presented and we have plans to coöperate with the Medical Society in collecting, clipping and filing every medical news item published which is available to us. If this is carried out efficiently over a six months' period a news analysis to determine the factual correctness of the stories and their objectivity will be made.

We are looking forward also to participating in the Medical Society's 24th ANNUAL SCIENTIFIC ASSEMBLY at the Hotel Statler, October 5, 6 and 7. Knowing what good drawing cards for attendance the White House and Embassies are, we hope to be able to offer a tour of the White House to visiting doctors and their wives. A tea at the lovely Embassy of the Dominican Republic is to be held on Tuesday, October 6. Ambassador Luis Francisco Thomen is a medical doctor and an Honorary member of the Medical Society of the District of Columbia. The charming Senora de Thomen will receive the visiting doctors' wives from four to six the second day of the Assembly. Naturally, the social aspects of the SCIENTIFIC ASSEMBLY are of minor importance in comparison with its medical and scientific aspects. We extend to the Medical Society every good wish for the year 1953-54 and stand ready to assist the Society wherever and whenever possible.

MRS. RICHARD H. TODD
President, Woman's Auxiliary to the Medical Society of the District of Columbia

MRS. RICHARD H. TODD
President

MILE POSTS TO HEALTH

The District of Columbia Survey of Medical Care for the Indigent and Related Services*

Laboratory Facilities

The laboratories of the 8 contract hospitals were found adequate in every way to care for the indigent and medically indigent patients assigned to them.

The laboratory facilities available at Freedmen's Hospital were found to be inadequate to properly service the number of patients assigned for diagnosis and treatment, in space, equipment, and personnel.

The laboratory of the Gallinger Hospital, on the other hand, was adequate in space, equipment, and personnel, but salary scales are too low to maintain a static personnel group.

The survey groups found the laboratory facilities of the District of Columbia Health Department adequate for the usual Health Department services but recommended that the scope of laboratory services provided should be controlled so as to confine procedures to matters solely of Public Health interest and the care of the indigent patient.

Recommendations on Laboratory Facilities and Services

freedmen's hospital

1. Place administrative authority of the clinical laboratories entirely with a Director of Laboratories, responsible directly to the Hospital Administration.
2. Redesign and modernize the entire laboratory.
3. Increase available funds. Whether to supplement the budget or allocate a greater part of the laboratory income to the laboratory department and less to general hospital fund is an administrative problem not within the scope of this committee.
4. Increase personnel and supplement training by refresher courses at hospital expense.

gallinger municipal hospital

5. That the salary scale for the chief of laboratories and his assistants be studied in comparison with other cities of similar size to ascertain whether or not the District of Columbia salaries are sufficient to attract and keep trained and experienced personnel.

district of columbia health department

6. The scope of the laboratory services provided should be controlled so as to confine the procedures to matters solely of Public Health interest and the care of indigent patients.
7. The budget should provide for replacement of worn-out equipment on a yearly basis.
8. The positions of Assistant Bacteriologist, Assistant Serologist, and Assistant Chemist should be filled by adequately trained younger men who can anticipate elevation to the directorship of their respective departments.
9. Refresher courses for laboratory personnel at other laboratories should be provided at District expense.

Rehabilitation Resources and Needs

No survey of medical care available to the indigent and medically indigent would be complete without an appraisal of the community's resources for helping physically and mentally disabled persons to make the most of their remaining capacities.

As used in this survey, rehabilitation refers to services to physically or mentally handicapped persons which are designed to prevent, minimize or eliminate residual disability and which will help them to attain the highest possible level of physical, psychologic, social and economic usefulness.

In terms of restoration of the physically handicapped, probably the figure of 20 per thousand in the population most nearly approximates the load we must plan on serving.

Existing rehabilitation resources are now meeting only a small portion of the total need for rehabilitation. Of the 24 agencies responding to the survey, 19 reported serving a total of 10,942 persons in the past year. Since any disabled person may receive services from several different specialized agencies, the unduplicated count of physically handicapped persons now being served is probably considerably below 10,000.

No comprehensive listing of agencies providing rehabilitation services in the District is available.

There is no single information or referral center which covers all phases of rehabilitation or which serves all handicapped persons, regardless of the nature of the condition or the service required.

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* Abbreviated portions of the report of the Survey have been appearing in the Medical Annals of the District of Columbia from month to month. This is the fourth installment.

Consequently many persons do not receive needed services or are lost between the various agencies, each carrying out its specialized function. A central source for information and referral, and improved coördinating devices are basic to better use of the limited services we now have.

Hospital departments of physical medicine and rehabilitation are relatively undeveloped, as are rehabilitation services in hospitals for the mentally ill and the school for the mentally retarded.

There are serious deficiencies in the present knowledge of the extent of the "rehabilitation problem." Although we can move forward with the knowledge we now have, sound community planning would be aided by more accurate statistical data on the prevalence and incidence of disability in our noninstitutional population and on the rehabilitation needs of disabled persons in hospitals and related institutions.

Serious shortages exist in the supply of adequately qualified rehabilitation workers in all professional fields—medicine, physical therapy, occupational therapy, psychology, social work, vocational education and counseling.

For public assistance recipients whose dependency is due to physical incapacity, there is great need for improved medical and diagnostic treatment services. Especially great is the need for thorough diagnostic study and for consideration of rehabilitation potentialities at the time of establishment of disability as a condition of receiving an assistance grant.

Rehabilitation efforts are often hampered by the low level of public assistance grants, which do not permit a healthful standard of living necessary to prevent breakdown or to meet the special expenses which the disabling condition entails. Other public assistance policies, such as reduction of the amount of the grant when intermittent or part-time earnings have added to the individual's income, or delays in reëstablishing eligibility when the individual loses his job, provide little incentive for rehabilitation.

Recommendations on Rehabilitation

To meet the needs for expanded and improved rehabilitation services, the following 14-point program is proposed for the consideration of the general medical care committee.

RECOMMENDATIONS FOR ACTION

1. The United Community Services should establish a committee to develop plans for a "rehabilitation center" and work toward its establishment. Such a center would be expected to:
    a. Enlist the entire community's support in developing a comprehensive rehabilitation program on a community-wide basis;
    b. Serve as a central information point and clearing house on available rehabilitation facilities;
    c. Promote the coördination of existing rehabilitation services through facilitation of interagency referrals and coöperative activities; and
    d. Provide those services that are now unavailable to physically or mentally handicapped persons without limitations on nature of disability, financial status, or other factors.

2. Hospital facilities for physical medicine and rehabilitation therapy should be established or enlarged to meet the needs of inpatient, outpatient, and home care services. Rehabilitation services in hospitals for the mentally ill should be augmented. Simultaneously, the community should work toward developing adequate facilities for other aspects of the care of individuals with long-term illnesses.

3. The United Community Services should establish a working committee to review, with the D. C. Commissioners and heads of agencies serving the handicapped, those operating policies and restrictive eligibility requirements that interfere with effective rehabilitation, and to work toward liberalization of such standards and flexibility in their application.

4. Training facilities should be expanded to produce additional rehabilitation workers in such fields as medicine, physical therapy, occupational therapy, crafts, and counseling. Moreover, training in all professional fields concerned with services to handicapped persons should include orientation to rehabilitation principles.

5. More adequate psychiatric, psychologic, and social services should be provided in programs of medical and rehabilitation services. The resources of social agencies providing family and mental hygiene services should also be expanded.

6. In the interest of using to greater advantage our present resources, steps should be taken to develop and strengthen the "team approach" in rehabilitation. The UCS should promote interagency case conferences as a means of integrating the services of various agencies and professional disciplines on behalf of the individual.

Calendar of Meetings, July 16–August 15, 1953

July 20	Obstetrical Board
July 21	Grievance Committee
July 28	Committee on Public Information
July 29	Subcommittee to Review Claims for Liability Insurance
August 5	Subcommittee on Mental Health
August 7	Board of Censors
August 11	Executive Board Medical Officers' Reserve Units
August 12	Program Committee Subcommittee to Review Claims for Liability Insurance
August 14	Subcommittee of Section on Pathology and Laboratory Medicine

7. A positive program of adequate diagnosis, comprehensive service, and rehabilitation should be developed by the D. C. Rehabilitation Service, Board of Public Welfare, and related hospitals and agencies for persons receiving public assistance because of "permanent and total disability" and for persons applying for public assistance because of illness or disability.

8. The D. C. Rehabilitation Service and the Board of Public Welfare should jointly develop a vocational training program for the mentally retarded in order to make possible return to the community of an increased number of residents of the District Training School and to promote their adjustment in the community.

9. New and improved technics should be developed for placing handicapped persons in suitable employment. Facilities for evaluation of work capacity and for building up work tolerance should be expanded.

10. In the interest of beginning medical rehabilitation services as soon as possible after injury or onset of illness, relationships between hospitals, rehabilitation agencies, physicians in private practice, and workmen's compensation agencies should be fostered.

11. More adequate and comprehensive rehabilitation services should be extended to the severely disabled who are confined to their homes.

12. Recreational programs for the handicapped in their own homes, institutions and hospitals should be strengthened to increase the well-being of disabled persons, and promote their rehabilitation.

13. The program of the Visiting Instruction Corps (D. C. Home Teachers) should be broadened to include services to mentally retarded and emotionally disturbed children, and should provide for psychologic consultation to the staff who are dealing with emotional problems of children and their parents.

14. Medical and rehabilitation services should be extended by establishing clinics in the evenings and on weekends to serve those who cannot attend during regular hours without loss of earnings or for other reasons.

RECOMMENDATIONS FOR FURTHER STUDY

In so broad and complex a field as rehabilitation, the need for further information was found to be very great. Therefore, numerous recommendations for surveys, research, and additional statistical data were made.

1. Present estimates of need for rehabilitation services and facilities should be refined and improved through studies of the cases of hospitalized persons with long-term illnesses.

2. Research in technics for evaluating work capacity should be conducted.

3. The D. C. Recreation Department should undertake a study of the needs of handicapped persons for recreational services and of ways to meet such needs.

4. Rehabilitation needs of, and services to, handicapped children should be studied in a community conference.

   a. That a study be made of the placement problems and practices of the public and voluntary agencies seeking to place handicapped workers in employment. This study should be undertaken by the board of the rehabilitation center or, failing its early establishment, by United Community Services.

5. Studies should be made of such barriers to employment of persons with physical or mental handicaps as employer hiring practices, labor union attitudes and policies, and workmen's compensation laws, with special attention to "second injury" provisions.

6. The nature and extent of community need for sheltered workshops should be explored.

SOUTHEASTERN SURGICAL CONGRESS, WASHINGTON CHAPTER

will present the following program in an all-day meeting
Saturday, October 3, 1953, beginning at 9:00 a.m.
in the D. C. Medical Society's Building

ALL PHYSICIANS CORDIALLY INVITED TO ATTEND

HARRY LEE CLAUD, M.D., *President*, Presiding

1. "A Prepared Plastic Cast; Preliminary Report," MILTON COBEY, M.D.
2. "Surgical Treatment of Chronic Skin Ulcers," GORDON BELL, M.D.
3. "Mesenteric Thrombosis; Case reports," W. ROSS MORRIS, M.D.
4. "Diverticulitis as a Surgical Entity," CHARLES S. WHITE, JR., M.D.
5. "Hyperparathyroidism," PAUL KIERNAN, M.D.
6. "Cordectomy in Paraplegia," O. HUGH FULCHER, M.D.
7. "Cerebral Arteriography," ARTHUR MORRIS, M.D.
8. "The Changing Character of Transfusion Reactions," OSCAR B. HUNTER, M.D.

PANEL DISCUSSION ON FACTORS CONTRIBUTING TO SPEED IN SURGERY

Participants will be Drs. H. H. Kerr, Charles S. White, Sr., J. Ross Veal, and Donald Stubbs. It is expected that Dr. Charles Reid Edwards of Baltimore will participate in the program, including the Panel.

BOOK REVIEWS

Surgery of the Pancreas. RICHARD B. CATTELL, M.D., Surgeon, The Lahey Clinic, New England Baptist Hospital, New England Deaconess Hospital; AND KENNETH W. WARREN, M.D., Surgeon, The Lahey Clinic, New England Baptist Hospital, New England Deaconess Hospital. Price, $10.00. Pp. 374, with 100 figures. Philadelphia: Saunders, 1953.

This book presents a long needed summary of present-day management of the surgical conditions affecting the pancreas.

The book is based on experiences with over 1,000 cases treated at the Lahey Clinic, and is replete with valuable case histories.

In a field in which surgical procedure and surgical management are still in a considerable state of flux, the authors have succeeded in presenting a most up-to-date and authoritative volume. Especially useful are the chapters on "Congenital Malformations of the Pancreas," "Acute Pancreatitis," and "Carcinoma of the Pancreas and periampullary area."

This book is highly recommended to every surgeon and to physicians in general.

W. LEONARD WEYL, M.D.

Ciba Foundation Colloquia on Endocrinology. Vol. I. Steroid Hormones and Tumour Growth and Steroid Hormones and Enzymes. Pp. 315, with 48 illustrations. Vol. II. Steroid Metabolism and Estimation. Pp. 429, with 96 illustrations. Vol. III. Hormones, Psychology and Behaviour and Steroid Hormone Administration. Pp. 380, with 78 illustrations. Vol. IV. Anterior Pituitary Secretion and Hormonal Influences in Water Metabolism. Pp. 591, with 139 illustrations. G. E. W. WOLSTENHOLME, O.B.E., M.A., M.B., B.CH., General Editor for the Ciba Foundation; Assisted by MARGARET P. CAMERON, M.A., A.B.L.S. Philadelphia: Blakiston, 1952.

This Colloquia, now consisting of 4 volumes, is a compilation of conferences on various subjects related to endocrinology. Authorities in their respective fields have participated in these programs, conducted on an informal basis. The text includes not only the formal presentation of each discussor, but also more informal discussion of each theme by other members of the group.

This material should be in the library of all physicians interested in endocrinology and in possession of those participating in research which bears on metabolic changes.

LAURENCE H. KYLE, M.D.

News and Personals

The 39th Annual Clinical Congress of the American College of Surgeons will convene in Chicago, October 5–9, 1953. Headquarters will be The Conrad Hilton Hotel.

On Monday evening, October 5, President Harold L. Foss will deliver an address on "The American College of Surgeons, Its Obiligations and Responsibilities, Never Greater Than Now." The Eighth Martin Memorial Lecture will be given the same evening by Sir James Paterson Ross of London, England, on "Science and Surgery."

At the Convocation program, October 9, Dr. Fred W. Rankin, Lexington, Ky., will be installed as President for the year 1954. His address will be entitled, "The Responsibility of a Heritage of Idealism." New Fellows will be received into the College and honorary fellowships conferred.

Further information regarding this meeting may be secured from Dr. Paul R. Hawley, Director of the College, 40 East Erie Street, Chicago 11, Ill.

The Fifth Annual Scientific Assembly of the Maryland Academy of General Practice will be held at the Lord Baltimore Hotel in Baltimore, Md., October 21. An instructive day-long program of postgraduate lectures has been arranged by the Program Committee. The annual banquet will be held in the evening; the principal address will be given by Alfred P. Haake, Ph.D., author, lecturer and economic consultant to the General Motors Corporation. His subject will be "Pills and People."

Outstanding clinicians and teachers from Boston, New York, Philadelphia, and the District of Columbia will address the Academy. Dr. Robert H. Barter, Associate Professor of Obstetrics and Gynecology, George Washington University School of Medicine, will speak at the afternoon session on "X-ray Diagnosis of Pregnancy." Dr. Charles F. Geshickter, Professor of Pathology, Georgetown University School of Medicine, will follow Dr. Barter's paper with one on "The Newer Treatment of Asthma."

All practicing physicians, hospital residents and interns of the District of Columbia are cordially invited to be present. Physicians are urged to bring their wives since an interesting program, including luncheon, is being arranged for them. There is no registration fee for the scientific program. The tickets for the banquet may be obtained from Dr. Nathan E. Needle, 4215 Park Heights Avenue, Baltimore 15, Md. The charge is $7.50 per plate for physicians and $5.00 for their wives.

The U. S. Naval Medical School has conducted for a number of years a guest lecture series at Bethesda, Md. Every effort has been made, and with uniform success, to obtain a high quality and an interesting variety of lecturers. For the coming season the lecture dates are as follows:

September 25
October 30
December 4
January 29
March 12
April 30

Rear Admiral Lamont Pugh, Surgeon General of the Navy, extends a cordial invitation to civilian doctors in the Washington area to attend these lectures during the forthcoming season. In a letter to President Ramsey, he states, "Aside from the benefit which may be inherent in the lecture per se, it is believed that salutary benefit to all concerned should accrue from the intermingling of service and civilian doctors during the social hour which is held immediately following each lecture."

The list of dates is published so that members who are interested will be appraised in advance of the prospective lecture schedule.

The Fourth National Conference on Physicians and Schools, sponsored by the Bureau of Health Education of the American Medical Association, will be held at the Moraine-on-the-Lake Hotel, Highland Park, Illinois, September 30—October 2, 1953. The general Conference theme is "Health Services for School Children." Hotel reservations should be made direct with the Moraine Hotel.

The American College of Physicians announces the following **postgraduate courses** for the fall and winter months of 1953-54:

Course No. 1—Cardiovascular Diseases, October 12-17: Dr. Charles E. Kossman, Director; New York University College of Medicine, New York, N. Y.
Course No. 2—Physiological Basis of Internal Medicine, October 12-16; Dr. Eugene A. Stead, Jr., Director; Duke University School of Medicine, Durham, N. C.
Course No. 3—Internal Medicine, October 19-23: Dr. Wright R. Adams, Director; University of Chicago School of Medicine, Chicago, Ill.
Course No. 4—Clinical Neurology, November 2-6; Dr. Bernard J. Alpers, Director; Jefferson Medical College of Philadelphia, Philadelphia, Pa.
Course No. 5—Present-day Therapy and Its Physiological Basis, November 9-13: Dr. Maxwell M. Wintrobe and Dr. Louis S. Goodman, Co-directors; University of Utah College of Medicine, Salt Lake City, Utah
Course No. 6—Seminars in Internal Medicine, November 16-20: Dr. Rudolph Kampmeir and Dr. Hugh J. Morgan, Co-directors; Vanderbilt University School of Medicine, Nashville, Tenn.
Course No. 7—The Newer Biological and Physiological Approaches to Clinical Problems, November 16-20: Dr. William S. Middleton and Dr. Karver L. Puestow, Co-directors; University of Wisconsin Medical School, Madison, Wis.
Course No. 8—Ballistocardiography, January 11-13, 1954; Dr. Benjamin M. Baker, Jr., Director; Johns Hopkins Hospital, Baltimore, Md.

These courses are open to both members and nonmembers of the College. Fees for members are $30 per course and for nonmembers, $60. All registrations must be made through the Executive Offices of the College, Dr. E. R. Loveland, Executive Secretary, 4200 Pine Street, Philadelphia 4, Pa.

The National Gastroenterological Association will hold its 18th Annual Convention and Scientific Sessions at The Biltmore Hotel in Los Angeles, Calif., October 12, 13 and 14. These sessions are open to all physicians without charge.

On the three days following the Convention, the Association's Fifth Annual Course in Postgraduate Gastroenterology will be given at The Biltmore Hotel and the College of Medical Evangelists in Los Angeles. The Course will be under the personal direction of Dr. Owen H. Wangensteen, of Minneapolis, Minn., and Dr. I. Snapper, of Chicago, Ill., who will be assisted by a faculty from the medical schools in and around Los Angeles. The Postgraduate Course will be open only to those who have matriculated in advance.

Further information concerning the program and details of the Postgraduate Course may be obtained by writing to the Executive Officer, National Gastroenterological Association, 1819 Broadway, New York 23, N. Y.

The second **Fred H. Albee Annual Lecture on Rehabilitation** will be held at the Kessler Institute for Rehabilitation, West Orange, New Jersey, on Friday morning, October 8. The Albee Lecturer will be Dr. Sterling Bunnell of San Francisco, who will speak on "Tendon Surgery of the Hand." In the afternoon four panels have been planned on various aspects of surgery of the hand.

The program is open to all physicians. Those desiring to attend should communicate with the registrar of the Kessler Institute, Pleasant Valley Way, West Orange, New Jersey.

The New York Academy of Medicine is holding its **26th Annual Graduate Fortnight,** October 19-30. The subject will be "Disorders of the Blood and the Blood-forming Organs." The program will consist of evening lectures, morning panel meetings, and afternoon clinics presented by 20 participating hospitals in the metropolitan area, as well as a scientific exhibit. Non-Fellows of the Academy may register for the meetings by mailing a check for $10 for the entire program, or $5 for the second week, to the New York Academy of Medicine, 2 East 103rd Street, New York 29, N. Y.

A Postgraduate Course on Diseases of the Chest, sponsored by the Council on Postgraduate Medical Education of the **American College of Chest Physicians,** will be held at the Knickerbocker Hotel, Chicago, September 28-October 2. **Dr. J. Winthrop Peabody,** Chairman of the Council, will be moderator for the opening session, September 28, and will make some introductory remarks.

A Postgraduate Course on Diseases of the Chest will be held at the Hotel New Yorker, New York, November 2-6.

These annual postgraduate courses endeavor to bring physicians up to date on recent advancements in the management and treatment of heart and lung disease. Tuition for each course is $75. Complete information may be secured from the Executive Director, American College of Chest Physicians, 112 East Chestnut Street, Chicago 11, Illinois.

The 20th Annual Meeting of the American College of Chest Physicians will be held in San Francisco, California, June 17–20, 1954. Physicians interested in presenting scientific papers on any phase in the diagnosis and treatment of heart and lung disease should send a 100-word abstract not later than January 1, 1954, to Dr. Edgar Mayer, Chairman of the Committee on Scientific Program, 850 Fifth Avenue, New York 21, N. Y.

The Trustees of the **Caleb Fiske Fund of the Rhode Island Medical Society** announces as the subject for this year's prize dissertation, "Recent Advances in Cardiac Surgery." The essay must be typewritten, double spaced, and should not exceed 10,000 words. A cash prize of $250 is offered. For complete information regarding the regulations write to the Secretary, Caleb Fiske Fund, Rhode Island Medical Society, 106 Francis Street, Providence 3, R. I.

The American College of Chest Physicians offers **three awards** to be given annually for the best original contribution on any phase relating to the diagnosis and treatment of chest disease by a medical student of an accredited medical school. The first prize will consist of a cash award of $250 and a certificate. The second and third prizes will be certificates of merit. The winning contributions will be announced at the 20th Annual Meeting of the College, to be held in San Francisco, Calif., June 17–20, 1954. Full details regarding the contest may be secured by writing to the Executive Director of the College, 112 East Chestnut Street, Chicago 11, Illinois. Closing date for receipt of manuscripts is March 15, 1954.

The South Dakota Board of Medical Examiners has announced the passage of legislation creating an annual registration fee for licensees in that state in the amount of $2.00. The registration takes effect, January 1, 1954. Any physician who is licensed in South Dakota and wishes to maintain that license by payment of the registration fee should contact the South Dakota Board of Medical Examiners, 300 First National Bank Building, Sioux Falls, South Dakota.

Medical, scientific and technical books are desperately **needed in Israel** since inability to obtain dollar exchange for their purchase in America has critically handicapped the acquisition, through ordinary channels, of the needed textbooks. Physicians or other individuals, libraries, and publishers who have medical books in good condition, published since 1940, are urged to send them by prepaid parcel post to Books for Israel, 115 King Street, New York 1, N. Y. Up to 70 pounds may be sent by parcel post at 8 cents for the first pound, and 4 cents for each additional pound, marked "Book Rate." Please give return address of individual or organization, so that the gift may be acknowledged. Funds for shipment from New York to Israel have been provided by the U. S. State Department.

Dr. Chester Scott Keefer, Professor of Medicine at Boston University School of Medicine, was sworn in, August 12, as **Special Assistant** (Health and Medical Affairs) **to the Secretary of Health, Education and Welfare.** Secretary Oveta Culp Hobby, Under Secretary Nelson A. Rockfeller, and Surgeon General Leonard A. Scheele, PHS, were among the Department officials who witnessed the ceremony.

Dr. Keefer received his medical degree from Johns Hopkins University in 1922. In addition to a long career in teaching, Dr. Keefer is an expert on antibiotics, supervising penicillin and streptomycin distribution for the United States and Allies in World War II. As Chairman of the National Research Council's Committee on Chemotherapeutics, he advised on civil defense medical stockpiling. He is on leave from his position as Physician-in-chief of the Massachusetts Memorial Hospital, which he has held since 1940, and from his teaching post.

As Special Assistant, Dr. Keefer will be charged with reviewing and advising Secretary Hobby on all health and medical programs of the Department as well as on health and medical legislation.

Group medical practice in Washington will be augmented by the opening of **The Washington Clinic** in September or October, 1954, according to present plans. The new Clinic will occupy a three-story building on a triangular tract of land formed by the intersection of Military Road and Western Avenue, N.W., just east of Wisconsin Avenue. Cost of the building has been estimated at $400,000; construction will begin this fall.

Physicians who will participate in the Washington Clinic include: Dr. Joseph A. Bailey, internal medicine; Dr. William Cole, radiology; Dr. Leo I. Donovan, general medicine; Dr. William N. Gadol, general medicine; Dr. Michel M. Healy, internal medicine; Dr. William L. Howell, internal medicine; Dr. Paul Kiernan, surgery; Dr. Allan E. King, obstetrics and gynecology; Dr. John Minor, internal medicine; and Dr. Robert G. Taylor, internal medicine.

Doctors who will serve on a consulting basis include: Drs. James J. McFarland, Jr., and Daniel B. Moffett, otolaryngology; Dr. Frank Ashburn, thoracic surgery; Dr. William P. Herbst, urology; Dr. Hugo V. Rizzoli, neurology; and Dr. Noel Stow, ophthalmology.

A wing of the Clinic will be called the James F. Mitchell Foundation for Medical Education and Research, named for Dr. Mitchell, now retired, formerly Chief of Staff of Emergency Hospital. The Foundation will sponsor research projects and will also make fellowship grants.

The building and equipment will be owned by the Clinic Properties Association, Inc., a nonprofit organization. Trustees are Henry Spencer, retired railroad executive; Arthur Gardner, Ambassador to Cuba; and Senator Lister Hill of Alabama, co-author of the Hill-Burton Hospital Construction Act.

On August 15 the name of Gallinger Municipal Hospital was officially changed to **District of Columbia General Hospital.** The Hospital was named originally in 1922 for Senator Jacob H. Gallinger of New Hampshire, who died in 1917. He had served for 22 years on the Senate District Committee and was credited with introducing much favorable monetary legislation for what was during his tenure of office called The Washington Asylum and Jail.

The Washington Psychoanalytic Society elected the following new officers, June 19:

Dr. Ernest E. Hadley, *President*; Dr. Douglas Noble, *Vice President*; Dr. Stanley L. Olinick, *Secretary-Treasurer*.

The officers for the **Sections on Radiology and Gastroenterology,** shown on page 385 of the July issue of the MEDICAL ANNALS, were transposed. Apologies of the news writer to both Sections. The officers of these Sections were listed correctly in the August issue, page 448.

Dr. Francis M. Forster, who has served on the faculty of Georgetown University School of Medicine since 1950 as Professor of Neurology and head of the Department of Neurology, took office, July 1, as Dean of the Georgetown School of Medicine, succeeding the Reverend Paul A. McNally, who was forced to give up his post because of ill health. Father McNally has been Regent and Dean of the School of Medicine since 1947; he is now Dean Emeritus and Director of the Georgetown Medical Center.

FRANCIS M. FORSTER, M.D.

New Dean of Georgetown University School of Medicine

Before coming to Georgetown, Dr. Forster had been Associate Professor of Neurology at Jefferson Medical College in Philadelphia from 1947 to 1950. His teaching background also includes the Harvard Medical School, Yale University School of Medicine, and the Boston University School of Medicine.

Dr. Forster is a native of Cincinnati, Ohio. He received his degree in medicine from the University of Cincinnati in 1937. After interning at the Good Samaritan Hospital in Cincinnati, he continued his postgraduate training in neurosurgery and psychiatry at the Boston City Hospital and the Pennsylvania Hospital in Philadelphia.

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Dr. Forster is Chairman of the Section on Mental and Nervous Diseases of the American Medical Association, Vice President of the American Academy of Neurology, and Chairman of the Research Grants Committee of the American Neurological Association. He is President of the American branch of the International Physicians' League Against Epilepsy. He has been an Active member of the District Medical Society since 1951.

Georgetown University Medical Center announces construction plans for a new $1,350,000 **School of Nursing building** to replace the University's present school of Nursing now accommodated in the old Georgetown Hospital at 35th Street and Prospect Avenue, N.W. It will be built east of the Hospital, to which it will be connected by a tunnel. Its exterior will match those of the other structures.

The building will contain dormitory accomodations for 296 women students and additional rooms for 13 faculty members as well as classrooms, library, dining room, auditorium, administrative offices, lounge, and other facilities.

Construction funds for the new building were obtained through a loan of $1,188,000 from the United States Housing and Home Finance Agency. The balance is being provided from University sources.

Several members of the Medical Society participated in the **Seventh Annual Scientific and Clinical Conference of the Association for Physical and Mental Rehabilitation,** which was held at the Mayflower Hotel, July 20–24. The convention was opened by the General Chairman, Vice Admiral Ross T. McIntire, MC, USN (Ret.), The President's Committee on Employment of the Physically Handicapped. Dr. Herbert P. Ramsey, President of the Medical Society of the District of Columbia, and Dr. Daniel L. Seckinger, Director of Public Health, extended a welcome to the guests.

Dr. Harvey J. Tompkins, Chief of the Psychiatry and Neurology Division, Veterans Administration, was Chairman of a Panel on Reaching the Catatonic Patient; he discussed "The Problem of the Catatonic Patient." Dr. Tompkins was also Chairman of a Panel on An Intensive Program of Corrective Therapy for the Psychiatric Unit of the General Hospital and gave the introductory talk. In this latter panel discussion, Dr. Lucy D. Ozarin, Assistant Chief of the Hospital Psychiatry Section, VA, spoke on "Psychiatric Treatment—Aims and Methods."

A Panel on Rationale for Activity Therapy was under the chairmanship of Dr. A. B. C. Knudson, Chief of Physical Medicine and Rehabilitation Division, VA, who discussed "The Need for Conceptualization of the Activity Therapy Process as a Diagnostic Tool, Prognostic Aid and Treatment Method." Dr. Dexter M. Bullard, Medical Director of Chestnut Lodge, Inc., a panel participant, spoke on "Symbolic Activity as a Tool of Communication."

Dr. Leonard A. Scheele, Surgeon General of the Public Health Service, was chairman of a Panel on Bridging the Gap between the Hospital and the Community. He presented the topic, "Mobilizing All Potential Resources for the Return, Adjustment and Acceptance of the Patient into the Community."

Dr. Edward J. Stieglitz will speak on the follow-up aspects of geriatric treatment, including social case work and nutrition, at a Geriatrics Symposium to be sponsored by the Veterans Administration and the Peninsula Academy of Medicine (Virginia), September 24 and 25. The sessions will be held at the Chamberlin Hotel, Old Point Comfort (which adjoins the VA center, Kecoughtan) and will be attended by leaders in the field of geriatrics and allied specialties. Chairman is Dr. James F. Conner, Chief of Professional Services at the Kecoughtan Center; inquiries should be addressed to him.

The first muscular dystrophy clinic in Washington was opened at Georgetown University Hospital on August 5. It will be supported by the Washington Chapter of the Muscular Dystrophy Association, which plans to open a campaign for public funds in September. Mr. Richard Woods, President of the Chapter, presented Dr. Tiffany Lawyer, Jr., who will have charge of the clinic, a check for $10,000 for its operation. Dr Lawyer is Assistant Professor of Neurology of the School of Medicine and was recently on the staff of the Veterans Administration Central Office as Chief of the Neurology Section of the Division of Psychiatry and Neurology.

The clinic will study patients afflicted with the disease and will use physical therapy in its treatment. It will be open every Wednesday morning at 8:30 a.m. and will function only for outpatients who are referred by their family physicians. The telephone number is Emerson 2–4000, Extension 542.

Columbia Hospital for Women is endeavoring in a novel way to cut down disturbances from portable radios brought in by patients; it has installed 100 individual patient radios equipped with under-the-pillow speakers. The radio programs are carried only to reclining listeners. One dime buys an hour of radio time and may be received in installments. Columbia Hospital is the first in the Washington Metropolitan Area to try out this type of equipment.

Elected to the staff of **Prince Georges County General Hospital,** July 29, were:

Dr. Aaron Deitz, Chief of Staff; Dr. Wolcott L. Etienne, Vice President; Dr. Waldo B. Moyers, Secretary; Dr. Leslie French, Chief of Medicine; Dr. Robert J. Coffey, Chief of Surgery; Dr. Saul Schwartzbach, Deputy Chief of Surgery; Dr. J. Francis Warren, Chief of Obstetrics and Gynecology; Dr. George Hageage and Dr. Benjamin Miller, members of the Executive Committee.

Dr. Alvin B. C. Knudson has received the John Eisele Davis Award from the Association for Physical and Mental Rehabilitation for having pioneered "in developing philosophies of rehabilitation in relationship to advancing concepts in the fields of science and medicine." Announcement of the award was made on August 1. Dr. Knudson is Chief of the Physical Medicine and Rehabilitation Division of the Veterans Administration. He is on the staff of George Washington University School of Medicine as Associate in Physical Medicine and Rehabilitation and carries the same title on the staffs of the University and District of Columbia General Hospitals. He holds an Associate membership in the District Medical Society.

Dr. Louis B. Bachrach presented two films before the First World Congress on Fertility and Sterility in New York, May 24–31. They were entitled, "Vaso-epididymostomy for Obstructive Infertility" and "Congential Bilateral Atresia." Dr. Bachrach received a commendatory letter from the Chairman of the Subcommittee on Motion Pictures for the excellence of his films.

Dr. I. Phillips Frohman was the guest luncheon speaker at a Symposium on Acute Infectious Diseases sponsored by the West Virginia Chapter of the American Academy of General Practice at the Fairmont Hotel in Fairmont, West Virginia, August 16. Dr. Siegle Parks, of Fairmont, President of the West Virginia Chapter, invited Dr. Frohman to speak on "Invest in You," the title of an article which he had prepared for *Current Medical Digest.*

Dr Frohman is a new member of the Publications Committee for GP, official organ of the American Academy of General Practice. He replaces Dr. U. R. Bryner, of Salt Lake City, Utah, who resigned from the Committee.

Dr. Howard T. Karsner, Medical Research Adviser to the Surgeon General of the Navy, has been appointed Chairman of the Advisory Medical Board of the Leonard Wood Memorial (the American Leprosy Foundation). Another recent appointment for Dr. Karsner was membership on the Committee on Medical Research of the American Trudeau Society, which is the medical section of the National Tuberculosis Association. He was also reappointed Chairman of the Committee on Pathology of the Division of Medical Sciences, National Research Council.

On September 3 and 4 Dr. Karsner participated in the meetings of the North Carolina Heart Association in Winston-Salem. By invitation he conducted two clinico-pathological conferences and gave a lecture on "The Pathogenesis of Arteriosclerosis."

Dr. Roger Baker has been appointed Professor and Head of the Department of Urology at Georgetown University School of Medicine, succeeding Dr. Lloyd G. Lewis, who relinquished the chairmanship of the Department but will remain on the staff. Dr. Baker comes to Georgetown from Chicago, where he was Assistant Professor and Head of the Division of Urology at the University of Chicago.

A paper, co-authored by three Washington physicians, was presented at the meeting of the **International Congress on Electro-encephalography** in Boston, August 20. It was entitled "The Use of Metrazol by Mouth to Bring Out Latent Abnormalities in Brain Waves." The authors were **Dr. Francis M. Forster,** Dean of Georgetown University School of Medicine; **Dr. Bushnell Smith,** Clinical Instructor in Neurology at Georgetown; **and Dr. Joseph F. Fazekas,** Chief of Staff at D. C. General Hospital.

Dr. Pearce Bailey, Clinical Professor of Neurology at Georgetown University School of Medicine, was installed as President of the **American League Against Epilepsy** at a meeting of that organization in Boston, August 21–22. Dr. Francis M. Forster, Dean of Medicine at Georgetown, retired as President. A paper on "The Treatment of Epilepsy with Mayoline and Milontin," prepared jointly by Dr. Forster and Dr. Bushnell Smith, Clinical Instructor in Neurology at Georgetown, was presented to the session, August 22.

Dr. Stanley E. Krumbiegel will head the Public Health Service's outpatient clinic in Washington, according to an announcement by the Department of Health, Education and Welfare. He succeeds **Dr. Clifton K. Himmelsbach,** an Associate member of the District Medical Society who was recently named Assistant Chief of the Division of Hospitals.

Dr. Krumbiegel has served as Medical Director of the Bureau of Prisons since 1948; he is being succeeded by **Dr. Harold M. Janney.** Dr. Janney, before his appointment, was Medical Director of the Federal penitentiary in Atlanta.

Colonel Ernest Allan Brav, MC, USA, has been assigned to Walter Reed Army Medical Center as Chief of the Orthopedic Service of the Center's Hospital component. He succeeds Colonel August W. Spittler, who was transferred to Brooke Army Medical Center, Fort Sam Houston, Texas. For the past three years Colonel Brav has been Chief of the Orthopedic Service at Letterman Army Hospital, San Francisco, Calif. During this time he was also an Assistant Professor of Orthopedic Surgery at Stanford University, Palo Alto, Calif.

Colonel Brav received his medical degree from the University of Pennsylvania in 1927 and his Master of Surgery degree in orthopedic surgery from the University of Minnesota in 1933.

Dr. Samuel A. Silk, Assistant Superintendent of **St. Elizabeths Hospital,** retired, July 31, after 36 years of service on its staff. **Dr. Addison M. Duval,** First Assistant Physician, has succeeded Dr. Silk in office. **Dr. Jay L. Hoffman,** formerly on the staff of St. Elizabeths and now Director of Professional Service at the Veterans Administration Hospital in Bedford, Mass., has been appointed First Assistant Physician, succeeding Dr. Duval.

Dr. Roland B. Scott, Chief Pediatrician of Freedman's Hospital, attended the annual session of the National Medical Association in Nashville, Tennessee, August 10–14. Dr. Scott presided as Chairman of the Section on Pediatrics and gave a talk on "Management of Bronchial Asthma in Children."

Dr. Scott was elected to membership in the Section on Allergy of the American Academy of Pediatrics by vote of the Executive Committee.

Dr. Montgomery Blair, Medical Director of Children's Hospital, has been named by the District Commissioners to the nine-member Public Welfare Advisory Council. The Council replaces the Board of Public Welfare.

Colonel Raymond Maret, MC, USA, has arrived at Walter Reed Army Medical Center, for assignment to the Medical Service of the Hospital. He has been commanding officer of the 382nd General Hospital in Japan since 1951.

Following service in World War II, Colonel Maret reopened his Washington offices in 1946; he was recalled to active military duty in 1950.

Lt. Timothy F. O'Donovan, MC, USNR, has been serving with the Amphibious Forces, U. S. Atlantic Fleet, since January 1953 and presently is assigned as medical officer aboard the *U.S.S. Pocono*, Flagship of the Commander of the Amphibious Forces. He expects to be separated from Naval service about the first of the year.

Dr. Robert V. Choisser has been recalled to active duty in the U. S. Navy Medical Corps and will report for duty October 15. He has been assigned to dispensary duty at the Naval Shipyard in Pearl Harbor, Hawaii.

JOHN EDWARD PAYNE, B.S., M.D.

(1898–1953)

Dr. J. Edward Payne, internist, died, July 27, 1953, in Arlington Hospital, where he was taken after he was stricken in his office at 3620 Wilson Boulevard, Arlington, Va. He resided at 3110 North 17th Street, Arlington.

Dr. Payne was born in Lumberport, West Virginia, June 28, 1898, the son of the late Dr. John B. Payne, who died in 1952, and Sallie Corpening Payne. He attended the Washington Irving High School in Clarksburg, West Virginia. He graduated from West Virginia University in Morgantown in 1920 and from the University of Maryland School of Medicine in 1922. He interned at the University Hospital in Baltimore the following year. Interested in further study of the heart, Dr. Payne took postgraduate work in cardiology at Harvard Medical School for a year, 1946 to 1947.

Before moving to Arlington in 1930, Dr. Payne practiced medicine in Clarksburg, West Virginia. He was Chief of Staff at Arlington Hospital since 1945 and was on the courtesy staff of most of the Washington hospitals.

He was an Active member and Past President (1945) of the Arlington County Medical Society, an Associate member of the District Medical Society since 1939, and a member of the American Medical Association, the Virginia State Medical Society, and the American Heart Association. He was also a member of the Arlington Kiwanis Club of Arlington and Sons of the American Revolution. He served in the Army Medical Corps in World War I.

His wife, Mrs. Ruby Smith Payne, survives him together with two sons, John Gardner Payne, of Springfield, Virginia, and Edward Corpening Payne, 219 North Greenbrier Street, Arlington, Va.

Gastric Decompensation—Gibb

(Continued from page 455)

would in this way drain off any excess stomach contents directly into the jejunum and thereby prevent gradual dilatation and distention.

CONCLUSION

The evidence to support this concept of gastric compensation and decompensation is fragmentary, open to criticism, and may be entirely incorrect. However, it seems a more workable theory than any that are described in the standard texts on the subject. Proof would be extremely difficult by any of the usual experimental means at hand. Balloon studies, for instance, introduce an entirely foreign condition within the stomach. In radiographic studies with the usual barium mixtures the stomach is filled with an inert substance which must affect this organ differently than would a normal meal. All the important psychic factors so important to normal digestion are absent.

1514 Twenty-first Street, N.W.

Essential Hypertension—Evans

(Continued from page 458)

given the physician in his struggle against high blood pressure. Unfortunately, their application is restricted and, in fact, their very potency emphasizes their limitations, since they can be used only under careful medical supervision. However, there is reason to hope that these drugs herald the development of other agents which will be more practicable and more effective in hypertensive vascular disease.

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Artificial Insemination—Bieren

(Continued from page 462)

found oligospermia. His highest count was 5,000,000 with 15 per cent motility and a high percentage of abnormal forms. The wife was normal. Basal temperature indicated ovulation, confirmed by endometrial biopsy on 2 occasions. Tubal insufflation indicated normally patent tubes. She was inseminated 3 times each cycle for a total of 14 cycles by physician "C" by means of the cervical spray technic, without success. She then went to physician "E," who used the cervical cap method, and on the second cycle of treatment she became pregnant. The pregnancy was normal. When the baby was 18 months old she returned to physician "E" and has had 4 more cycles of treatment, thus far without success.

In couple no. 8 the husband was azoöspermic. There was no abnormality in the wife. Basal temperature indicated regular ovulation, which was confirmed once by endometrial biopsy. The tubes were freely patent to insufflation. She was inseminated by physician "E" 3 times each cycle for a total of 18 cycles by means of the cervical cap technic, without success. She then went to physician "C" and was inseminated for another 11 cycles by the intra-uterine technic, again without success.

CONCLUSION

A summary of the experience of 8 couples with donor insemination over a period of 5 years is reported. This measure has distinct limitations, can involve prolonged periods of treatment at considerable expense, and may end in failure. For some couples its use may be justified.

Anxiety Reactions—Laughlin

(*Continued from page 472*)

The acute anxiety attack is an extremely uncomfortable, self-limited burst of anxiety with marked emotional distress accompanied by the physical and somatic responses usually associated with fear. The basis of concern is out of conscious awareness. It may be an isolated phenomenon or occur in the course of anxiety neurosis.

The anxiety state is a more established process in which a level of anxiety or tension is present to some degree over a period of time. Contributing situational factors are generally in evidence.

The anxiety neurosis is a firmly established chronic emotional illness characterized by diffuse anxiety (uneasiness, apprehension, or anxious expectation in which the cause is not clear). It is not controlled by specific defense mechanisms as in other types of neuroses. Anxiety neurosis is therefore that type of neurosis in which anxiety itself is the most prominent presenting feature.

Finally, some ideas and cautions in the management of the anxiety reactions have been presented, and the importance for the patient to assume responsibility and to actively collaborate in the treatment has been stressed.

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CARDIAC ARREST
With Report of a Case Successfully Defibrillated

GEORGE WILLIAM WARE, M.D.

Instructor in Thoracic Surgery, Georgetown University School of Medicine

CARDIAC arrest may be defined "as the 'apparent' cessation of cardiac function, manifested by the lack of blood pressure and of apical and peripheral pulse."[1] It is an episode which can and will occur in every operating-room suite, no matter how small. It is a catastrophe which is attended by a high mortality, although it will respond to prompt and intelligent treatment. This paper is intended to review the subject and report 3 cases in which treatment was successful. One of this group was an instance of ventricular fibrillation.

HISTORY[2–10]

Cardiac arrest has been publicized in both the newspapers and medical literature. Bringing people back from death is always intriguing. A superficial survey would seem to reveal that recognition and treatment of the condition are about 10 years old. Actually this is not so. Scientific experiments and fundamental knowledge of the situation date back to the last century.

Schiff in Germany in 1874 began the first experimental work.[6] Anesthesia was a medical novelty and fatalities were little understood. Schiff anesthesized dogs with chloroform, produced cardiac arrest and then practiced methods of revival. It is interesting to note his understanding of the problems. He recognized the need for adequate ventilation of the lungs, "rhythmic compression of the heart with the hand" and "compression of the aorta so as to increase cerebral flow." He also practiced the thoracic approach for massage. Schiff's work continued for the remainder of the century, and because of him interest in the problem spread first through Europe and then to this country.

In 1880 Niehaus of Berne performed the first massage of the heart in a human.[6] His report was preceded by that of Tuffier and Hallion. Since the cause of death in their patient was a pulmonary embolus, the attempt was unsuccessful. Their account was published in 1898 and because of the date of publication is usually stated to be the first.[7]

Maag in 1900 was able to reëstablish cardiac contractions and spontaneous respirations, but the patient died during the early postoperative period.[7]

Igelsbrud in 1901 was the first to be successful. Contrary to many clinical workers of the time he felt that artificial respiration and drugs were secondary to the beneficial effects of massage. He utilized a transthoracic approach. This case was not reported until 1904 by Keen.[7] Again, delay in publication resulted in loss of credit. Due to this delay, Starling and Lane[9] are usually stated to have had the first successful case. Their case was reported in 1902 and was treated by subdiaphragmatic massage.

To my knowledge, Kemp[11] was the first person to perform cardiac massage in this country. Utilizing positive pressure anesthesia, he worked transthoracically in 1901 for arrest following drainage of an appendiceal abscess. The case was unsuccessful. The discussion following presentation of his paper in 1903 is highly illuminating. This discussion showed that cardiac arrest was well known, if perhaps not well understood, in the United States in the first few years of this century.

An idea of the intense interest in the subject at the turn of the century may be grasped when one realizes that White[10] in 1909 reported his experiments and personal cases and added 48 cases from the literature.

ETIOLOGY

Certain fundamental principles can be stated. Operations of great magnitude more easily form the background for cardiac arrest, since more variables are brought into play. Thoracic and especially cardiac procedures predispose to cardiac arrest. Cooley[12] reported 878 patients with pulmonic stenosis who received surgery at Johns Hopkins Hospital, 48 of whom required cardiac massage. Such patients undergo a major operative procedure with an abnormal heart and a strained myocardium. They are more prone to develop arrest and also respond poorly to treatment.

Reid and Brace[13] point out another factor, namely, that a heart under anesthesia is not normal and is as vulnerable to vagal stimulation "as is a structurally altered heart without anesthesia."

The exact cause in every case cannot always be ascribed. A statement of Becker[14] should be used as a guide: "Any factor that causes decreased circulation or oxygenation of the blood promotes cardiorespiratory failure and any existent disease of the heart or lungs enhances its chances for development."

Anesthesia. Most cases of arrest occur during surgical anesthesia, general, spinal, regional block, and indeed with no anesthesia in a preoperative patient.[15]

Cyclopropane is the anesthetic agent which is usually discussed in this respect, since it has been proved that the incidence of cardiac arrhythmias is high. It is believed that cyclopropane can sensitize the heart to epinephrine with resultant ventricular fibrillation.

Ziegler,[16] in an analysis of the cardiac mechanism in a group of 175 Blalock procedures under cyclopropane anesthesia, found that only 35 were regular throughout the procedure. He believed that the anesthetic agent was more important in their causation than the operative procedure. Interestingly enough, ventricular fibrillation was seen only once in the group and then only after a long period of asystole treated with epinephrine and massage. Ziegler explains this by the presence of severe anoxia which acted as a myocardial depressant.

Hypoxia.[16, 18] The obvious mechanisms immediately suggest themselves, too heavy preoperative medication, obstructed airway, and overdosage with the anesthetic agent.

Hypoxia will exert a 3-fold detrimental effect. There will be an accumulation of CO_2 in the cardiorespiratory center which will result in slowing of the heart rate, fall in blood pressure, and ultimately cessation of the heart in diastole. CO_2 accumulation (locally in the myocardium) will affect the sino-atrial node and also slow the heart rate. An additional factor is the increased presence of epinephrine in the blood stream. Anesthesia per se causes excretion of epinephrine, and the asphyxia increases this excretion.

Downs[19, 20] thought that still another mechanism was operative. As a result of his experiments with nitrous oxide anesthesia, he believed that there was a hypersensitive carotid sinus reflex present with hypoxia. Such a carotid sinus reflex by its efferent vagal limb could cause cardiac arrest.

Vagal reflexes. Both clinical and experimental experience amply prove the role of vagal reflexes in cardiac inhibition.[21] Crile[22] was one of the first to consider these effects. In a series of 65 patients undergoing intubation, he had 3 deaths. He studied the matter in the laboratory and noted the temporary inhibition of respiration and the occasional inhibition of cardiac action when intubation was performed. He also noted that such effects could be prevented by local cocaine or the administration of atropine.

Reid and Brace[13, 23] did clinical studies during the passage of an endotracheal tube, inflation of the cuff, and also bronchoscopy. Their series consisted of 35, and in 10 "there seemed to be indisputable reflex effects upon the heart as a result of the irritation of the mechanical agents used. . . ." They were convinced that these were due to vagal activity. They are very strong in their praise of the protective influence of atropine. In a recent review by Stephenson[24] and associates of 1,200 cases of cardiac arrest, a precipitating factor could be ascertained in 624. In 156 of this latter group the authors thought that a vagal reflex was responsible for the arrest.

In a similar vein, occurrence of cardiac arrest has been reported during the aspiration of an endotracheal tube in thoracic surgery.[8, 25, 26] Shumacker thought that this vagal influence was due to stimulation of the vagus plus the transitory hypoxia caused by the aspiration. Experimental work by Sloan[27] would support this contention. With direct stimulation of the vagi, he was unable to produce cardiac arrest unless there was concomitant hypoxia.

All thoracic surgeons are aware that traction on the lung root will cause detrimental changes in respiration and heart rate. The experimental basis for these clinical facts is the work of O'Shaugnessy.[28] He discovered that such traction in dogs caused respiratory changes including apnea, fall in blood pressure, and pulse irregularities. Cocaine locally prevented the effects.

There are several reports in the literature which attribute cardiac arrest to manipulation of the vagi during the performance of vagotomy.[29, 30] Considering the popularity of vagotomy in the past few years, it is surprising that such effects have not been noted more. According to Gullickson,[31] this is due to the fact that the nerves are routinely sectioned below the pulmonary plexus.

Another vagal reflex, which is rarely mentioned in papers on cardiac arrest, has recently been suggested to me by Dr. John P. Gallagher.[32] This mechanism is best illustrated by patients with glossopharyngeal neuralgia.[33, 34] This phenomenon is due to the carotid sinus reflex, of which the afferent limb is the glossopharyngeal nerve and the efferent limb is the vagus. During these attacks the patients develop cardiac abnormalities ranging from bradycardia to cardiac asytole (proved by electrocardiogram) and clinically associated with syncope and a fall in blood pressure. These effects can be prevented by cocainization of the pharynx, procainization of the carotid sinus, and atropinization of the vagus. Patients who underwent section of the glossopharyngeal nerve were cured. These data are of extreme interest to otolaryngologists. They most probably explain the demise of patients who succumb during tonsillectomy and during the formerly feared drainage of a postpharyngeal abscess.[35]

Barbiturates. The possible role of these drugs as a trigger mechanism is debated. Goodman and Gilman[36] doubt that they are "directly toxic to the myocardium or seriously . . . alter cardiac rhythm or conduction." Other authors think that they exert a parasympathetic action.[1, 8, 37]

Potassium. This electrolyte has received much interest in the surgical literature of late. The possibility of cardiac arrest in potassium-deficient patients offers another reason for electrolyte balance in patients undergoing surgery.[1, 38, 39]

INCIDENCE

Cardiac arrest is not a rare occurrence.[24, 40] In 1945 Barber and Madden[2] collected 183 cases from the literature. Becker[14] reviewed 77 cases from 1945 to 1952. He concluded that the incidence was 1 in 1,000 anesthetics.

Cole[41] in 1952 reported 350 cases collected from the world literature. He stated that the details were vague in some and that true cardiac massage was not performed in all. Hanks and Papper[42] reported 23 cases from Presbyterian Hospital in New York in a 4-year period starting in 1947. Ehrenhaft[43] reported 25 cases of cardiac arrest in "71,000 anesthetic and operative procedures." Ament[38] reported 9 cases from Bellevue Hospital during 28,000 major operations in a 3-year period.

Stephenson, Reid, and Hinton[24] were able to collect 1,200 cases from the United States, Canada, England, Ireland, Australia, France and Puerto Rico. They stated that most of these occurred in the past 10 years.

Lahey and Ruzicka[8] assume that 1 or 2 cases will occur in a year in a busy operating-room suite. Hosler[44] has stated that "Cardiac arrest will occur on the average of 5 times each year in every active 700-bed hospital."

The youngest patient, I believe, was a 3-day-old infant who was undergoing surgery for a diaphragmatic hernia.[45] Twenty per cent of patients are under 10 years of age[46] and 50 per cent are in the fourth to sixth decade.[14]

BRAIN PHYSIOLOGY[47-59]

Prompt treatment is needed lest vital centers of the brain be so damaged that recovery is impossible. Ability to resuscitate the heart alone is not the important point, since it can stand lack of oxygen far longer than the brain. Indeed, the heart can regain activity after a number of hours, varying from 36[47] to 72.[23]

The exact period of time during which the human cerebrum can be deprived of oxygen and still recover completely is not exactly known.[60] The possible duration is usually given as 3 to 4 minutes, with 5 minutes stated as the absolute maximum from which full recovery can be expected.[1, 2] Occurrence in older individuals, previous pulmonary disease, and duration of anoxia during anesthesia all play a part in the critical time factor.

The experimental work of Weinberger and associates[56] is the basis for the time factor stated. They noted the work of Brown-Sequard who determined the order of sensitivity to anoxia of the central nervous system. He found that sensitivity decreased downward from the cerebrum through the medulla, the spinal cord, and finally the peripheral nerves.

Weinberger's group used cats and occluded the pulmonary artery for varying periods of time. To determine the interval, they used ophthalmoscopic observation of the retinal vessels. They concluded that loss of cerebral circulation up to 3 minutes and 10 seconds "was tolerated without any obvious neurologic disturbances." Beyond 3 minutes and 25 seconds there was always change in behavior and/or organic damage.

The specific organic changes in the cerebrum with anoxia have been studied by several authors.[48, 51, 55] Courville[48] in the laboratory produced asphyxia with nitrous oxide anesthesia and then studied the effects. The pathologic effects varied with the duration of life following asphyxia, modified by some individual variations. In the important cerebral cortex he found 4 characteristic lesions:

1. Degeneration of cells. There was an individual cell variation ranging from swelling to sclerotic changes.

2. Patchy necrosis. Some areas stained poorly due to absence of nerve cells and/or interstitial cellular elements and dilatation of the perivascular spaces.

3. Diffuse zonal necrosis. This represented the confluence of a number of focal areas. The

various layers of the cortex were irregularly involved.

4. Complete cortical destruction. This was, of course, the endpoint. At times scar tissue was present, showing attempts at repair.

Similar lesions have been reported by Löken[55] and Howkins.[51] These authors also described the lesions seen in the cerebellum, medulla and spinal cord of patients.

PREVENTION

Such a plan requires awareness of the possibility and avoidance of causes whenever possible. The risk will always exist in older patients, patients with cardiac disease, and those requiring cardiac surgery.

Careful preoperative preparation and medication, intelligent control of the depth of anesthesia, proper oxygenation, avoidance of hemorrhage, proper fluid replacement, all rightly belong in the proper management of any case and specifically will aid in the prevention of cardiac arrest. Atropinization should be a routine preoperative measure.

RECOGNITION

In a condition in which time is the very essence of success, premonitory signs are important.[61] Signs of anoxia are most important. The anesthetist usually notes some change in respiration. An irregular rate of respiration or cyanosis is an obvious warning of danger.

In the cardiovascular sphere a bradycardia is frequently the first sign. However, tachycardia or extrasystoles have also been noted. In Ziegler's series,[16] in which a continuous electrocardiographic record was made, there was first a sinus tachycardia (150–200), then a bradycardia. Asystole did not occur except when the bradycardia did not respond to atropine and dropped below a rate of 55 per minute.

Concerning the use of the electrocardiogram, it should be appreciated that this instrument is not accurate in recording cessation of life.[12, 16, 62, 63] By visual examination a heart action may be obviously distressed and a normal electrocardiogram obtained. Also, the heart may be seen in standstill and an electrocardiogram resembling normal be recorded.

With the chest open for thoracic surgery, recognition is simple. If abdominal surgery is in progress, the aorta can be palpated. If not, a carotid or femoral pulse can be checked. If doubt exists after these steps, the thorax should be opened immediately.

The anesthetist is the key man, since he is usually the first to diagnose the condition.[64] His approach to the problem at this moment will determine the outcome of the case. If he vacillates, rearranges his blood pressure cuff, waits for the change, or states the diagnosis with uncertainty to the surgeon, the patient will be lost. C. P. Bailey,[65] in stressing the need for the positive approach by the anesthetist, states: "We have trained our anesthetists so that they no longer feel around and finally, after several minutes, say 'I can't get a pulse.' Now when they suspect the patient's condition is not good, they feel for the carotid artery and if they do not feel a pulse, they say to the surgeon, 'The patient is dead. His heart is stopped. Will you open the chest or shall I?' This replaces the usual fatal hesitation and doubts by a surgical reflex, and the incision is made."

TREATMENT

Definitive therapy must begin in the surgeon's mind before he is faced with the catastrophe. At his leisure the surgeon must realize that cardiac arrest will happen to him. He must make the important mental decision that, when faced with this problem, he will perform cardiac massage. The main obstacle to success, after diagnosis, is mental indecision. If the surgeon has not considered the problem beforehand, he will be assailed by doubt, fear and ignorance. He must be convinced before the accident that an intercostal incision is a simple diagnostic procedure and that cardiac massage is a necessity. If a doctor can make a surgical incision, he can incise the thorax. The operator can wait for someone to close the wound, but he cannot wait for someone to make the incision.

In training and preparation for the problem, the surgeon should perform several maneuvers. During routine abdominal surgery, he should palpate the aorta. In the autopsy room, he should practice intercostal incisions. For his own edification he should attempt subdiaphragmatic massage and thus prove the difficulties of massage done through an abdominal approach.

Every operating room should review the problem yearly. The discussion should include the staff of anesthesia and surgery and all other operating-room personnel. The duty of each individual should be clearly defined. The role of the anesthetist should be that of diagnosis, and then pulmonary ventilation. All should clearly understand that the prime function of the surgeon is to make a thoracic incision and perform massage. It is important that this be a task he is expected to perform.

Several authors discuss resuscitation kits, and indeed they form a valuable addition to the operating room.[1, 37, 66, 67] These are sterilely prepared kits containing a few essential instruments, knife, hemostats, sponges, drugs (epinephrine and procaine), syringes and needles. The kit should be kept in a special cabinet in a central position in the operating room and properly labeled. Such a precaution insures availability and also makes surgical personnel subconsciously aware of the problem.

The surgeon should realize that his first attempt may well be abortive. This is a technical maneuver with a distinct time limit. Only by actually performing massage can defects in technic be realized and plans made to overcome them.

Oxygenation. This is the first step and the sole duty of the anesthetist. If an endotracheal tube is not immediately available, 100 per cent-oxygen bag pressure should be used. No success can be obtained without proper oxygenation of the blood. It is interesting to note that Thompson and Rockey[68] found that with positive-pressure oxygen alone there is some circulation. However, the method is so inefficient that no reliance can be placed on it alone.

Cardiac Massage. Although some authors still recommend subdiaphragmatic massage,[4, 37, 69-72] most writers agree that the transthoracic method is easier and far more efficient. Lahey has described subdiaphragmatic massage as tickling the heart.[73] Transthoracic massage is to be recommended even though abdominal surgery is in progress.

The surgeon should rapidly make a thoracic incision. No sterile preparation of the chest should or need be done. "There is no risk of empyema in a dead patient."[42] The incision should be made with a bold sweep of the knife in the fourth or fifth intercostal space and extend from the sternum to the anterior axillary line. The costal cartilages above and below should be cut to enable the hand to be inserted more easily. Bleeding will be absent, since there is circulatory collapse. The surgeon should have his hand on the heart in 10 to 15 seconds.[15] Thus a definite diagnosis of feeble pulsations of the heart, standstill, or fibrillation can be made.

The heart is grasped in the right hand with the thumb in front and the remaining fingers behind, and squeezed rhythmically. With a large heart, both hands may be necessary. Usually a sufficient grasp can be obtained through the intact pericardium. If not, it can easily be incised. If pulse and blood pressure can be obtained, massage is effective.

The method and rate of massage have been cleverly studied by Johnson and Kirby.[74] They found that compression of the heart against the sternum was very ineffective, whereas massage through the intact diaphragm was relatively ineffective. The faster the rate of compression, the more effective was the massage. However, the more rapid rates could not be maintained without rapid fatigue. They found that a rate of compression of 60 times a minute was effective and could be maintained without undue fatigue.

The thoracic aorta may be compressed manually to increase cerebral flow and has been found by the above-mentioned authors to increase carotid flow. Although this is usually regarded as a maneuver recent in inception,[75, 76] actually it is old. Green[6] quotes Schiff, the original experimentor, as reporting aortic compression as beneficial "so as to bring the blood in greater quantity towards the head." Pike, Guthrie and Stewart[77] in the early part of the century also used compression of the thoracic aorta to improve circulation.

Treatment of Ventricular Fibrillation. Wiggers[78] defines this state as "an incoördinate type of contraction . . . which produces no useful beats . . . death results in 6–8 minutes from anemia of the brain." It is a more serious complication than cardiac standstill, and success is more difficult to achieve. The occurrence of fibrillation was known to original investigators and by them was aptly termed "delirium cordis." Crile[79, 80] spoke of its occurrence following the use of adrenaline, noting when such contractions started that "the heart could not be resuscitated."

The exact incidence is not known. Beck[81, 82] states that it occurs terminally in 50 per cent of cases. Ventricular fibrillation will complicate massage for cardiac standstill, since 2 prerequisites for fibrillation are already present, anoxia and mechanical stimulation.[83] Stephenson and associates[24] have published a review of 1,200 cases of cardiac arrest. In this series there were 133 instances of ventricular fibrillation.

Prior to Stephenson's paper permanent success in defibrillation had been reported less than a dozen times.[54, 82-6] Beck[82] was the first to successfully defibrillate a patient in 1947. Johnson and Kirby[83] in 1951 stated that there were less than 5 successful cases in the literature, and in their report they added 4 successes out of 10 attempts. Stephenson in his extensive review recorded 30 successes in 133 cases of ventricular fibrillation.

Provost and Batelli in 1899 found that electric shock could stop delirium cordis.[87, 88] Although their work was known and electric treatments were popular during this era, it was not used extensively. Hooker and associates[88] revived the treatment, and by the publication of their data in 1933 reawakened interest in this field. The logic behind the maneuver is to supply a current which will cause contraction of all muscular fibers followed by relaxation.

Wiggers[78] pointed out the need for massage to eliminate the factor of anoxia and also introduced serial defibrillation. The latter method is the use of a series of shocks rather than 1. He found that 1 shock was not enough, since it often could not affect the whole myocardium. Hence he recommended a series of shocks (usually 3) with a strength of 1 ampere for less than a second and an interval between shocks of 1 to 2 seconds.

The diagnosis of ventricular fibrillation can usually be made by palpation ("bag of worms") or by direct vision. However, it may be present when the heart appears to be in asystole.[89] Lack of response to the usual methods of revival should raise the question of ventricular fibrillation. An electrocardiogram should be made to ascertain whether or not fibrillation is present.

In the treatment aeration of the lungs and massage of the heart are the first steps. A case has been reported by Thompson in which these measures alone may have caused reversion to normal rhythm. Procaine is used intracardially and also in the pericardial cavity. Five c.c. of a 1- or 2-per cent solution is employed. Overdosage is avoided so that contractility is not lost if reversion occurs in asystole. Procaine is valuable in reducing irritability of the myocardium. Experimentally procaine has caused reversion to a normal rate and in 2 human cases where combined with massage this has also occurred.[54, 84]

After the above measures, and only then is the electrical defibrillator used. This is a compact machine equipped with electrodes which uses ordinary house current (110 volts) and delivers a current of 1 to 1.5 amperes to the myocardium. The electrodes moistened in saline are placed anteriorly and posteriorly against the myocardium. A shock of less than 1 second is usually used. If this is unsuccessful, the massage is resumed and then the defibrillator used again. If the second attempt is not successful, serial defibrillation is used. Beck states that "the normal heart can always be defibrillated."[67]

Recently there has been a feeling that unsuccessful attempts in the past were due to the fact that insufficient currents were used, especially in the larger hearts.[65, 83, 90]

Details of design and construction of defibrillators are given in several articles.[71, 84, 91–3] In the construction, one point is pertinent for the safety of the surgeon. He should know whether or not an isolation transformer is included. If not, he should wear 2 sets of rubber gloves and stand on a wooden platform.

An experimental instrument is now being developed. This is an electronic pacemaker.[94, 95] The concept is to supply controllable electrical impulses to the heart in fibrillation or asystole. The thought is to superimpose a planned rhythm.

Drug Therapy. To one who has not performed massage the use of drugs has a strong appeal. The attitude is that their use cannot hurt, perhaps something is wrong with the technic of recording the blood pressure, or that the patient is really all right. Drug therapy fits into this *laissez faire* attitude. This is completely wrong. The initial thought must be thoracotomy and massage. Then and only then do drugs play a role.

Cole[41] has stated the problem very well: "No one would think of injecting drugs into an apneic patient instead of performing artificial respiration . . . similarly the patient in whom asystole has suddenly appeared should be given artificial circulation by cardiac massage rather than injections." Another quotation on the subject is in order. In considering the merits of drug therapy, Johnson[15] has stated, "No drugs are helpful in getting the heart to start beating again." Drugs will strengthen the beat of the heart but will not initiate the beat.[1, 16]

The route of injection of drugs used in connection with massage must be considered. Intravenous use prior to massage is foolish, since there is no effective circulation. After massage, since the drug will be diluted before it reaches the heart, injection into the heart should be made. An additional advantage of intracardiac injection has been thought to be the mechanical stimulation caused by the needle.[47, 96] Beecher and Linton,[97] however, reported a case in which repeated stimulation of the auricle with a needle had no response but injection of epinephrine did.

Beck[89] says that drugs should be injected into the muscle of the ventricle or into the right ventricular cavity. Others think that the danger of fibrillation is great because of the stimulus of the needle and recommend auricular injection.[97–9] An additional mode of application is the use in the pericardial cavity.[15, 83]

The use of epinephrine has been a point of controversy since it was first used by Stewart[77] and popularized by Crile[87] in resuscitation. It is agreed by all workers that epinephrine is a good cardiac stimulant; the controversy is concerning the dosage which should be used. Most authors stress the use of small dilute doses because of the danger of fibrillation of the ventricles. Ehrenhaft[43] has stated that a "dosage of 0.1 milligram in 1–10,000 dilution has been observed by us to cause ventricular fibrillation." Others have used much larger doses. Whenever an initial dose of 0.5 ml. of adrenalin is ineffective, C. P. Bailey[65] has used up to 5 ml. Bjork[100] has recommended increasing doses at intervals of a second, starting with 1 ml. of 1–1,000 adrenalin, then 5 ml., and again 10 ml. if there is no response.

There is a tendency to combine epinephrine with procaine for injection.[8, 38, 69, 73, 85] This is done because it is believed that procaine raises the threshold of irritability of the ventricle and thus prevents ventricular fibrillation.

In summary, it may be said that epinephrine is a powerful cardiac stimulant which has no place in therapy until cardiac massage has been performed. There is a possibility of ventricular fibrillation, especially since the heart is anoxic. Massage will improve this anoxia. The initial dosage should not be more than 0.5 ml. in a diluted solution. This dosage may be repeated but only after a course of massage has again been employed. If desired, epinephrine may be combined with procaine.

Procaine was first used by Mautz[101] to reduce cardiac irritability. It has now attained an important position. Some use it routinely in cardiac or thoracic surgery, both locally and systemically. Prefibrillary rhythms, such as auricular or ventricular tachycardia, in many instances can be controlled by intravenous procaine.[60, 102] Burstein[103] recommends the use of a 1 per cent solution in doses ranging from 30 to 70 mg. The drug may be used when fibrillation is present to control this state. Burstein was able experimentally to correct ventricular fibrillation by the use of procaine. Stutzman[104] and Kay[85] were not able to duplicate Burstein's experimental results. Nonetheless, clinical cases have been reported in which procaine combined with massage has caused reversion to a normal rhythm.[54, 74, 83]

Procaine combined with massage has been used in the myocardium, in the ventricular cavity, and in the pericardial cavity. The usual dose has been 2 to 5 ml. of a 1 or 2 per cent solution.

Recently the amide analogue of procaine has been introduced for the treatment of arrhythmias.[83, 105-8] It is known by the trade name of Pronestyl. The drug has several advantages over procaine. It can be used orally; it does not have a stimulating action on the central nervous system; and it is not rapidly hydrolyzed in the blood stream and, therefore, has a longer action.

Procaine amide has been tested and found to have definite prophylactic value against the occurrence of arrhythmias and in their treatment should they develop. There is some question whether it is as effective in the treatment of auricular as ventricular arrhythmia. However, in the problem at hand, the ventricular arrhythmias are far more important, and all agree that Pronestyl is extremely effective in these.

Toxic effects of the drug are transient hypotension when too rapid intravenous supply is given, and there are gastrointestinal upsets with high oral doses. Both of these are easily controlled by simply reducing the dosage. In this paper is reported a case of ventricular fibrillation which reverted to normal rhythm with Pronestyl and cardiac massage. I believe that this is the first case so reported. The recommended dosage in cardiac or thoracic surgery is 0.5 Gm. intravenously shortly before induction of anesthesia and then 1 Gm. in divided doses during thoracotomy. This is used as a 10 per cent solution.[106]

Fauteux[99] was apparently the first to use barium chloride to improve cardiac action. He combined it with epinephrine. Cooley,[12] in reporting its efficacy in several patients, stated (it) "produced apparent increase in force and amplitude of systolic contractions." Kay[85] used the drug experimentally and reported that it gave good results but was definitely inferior to epinephrine. All authors used 2 to 5 ml. of the 0.5 solution freshly prepared. It would seem that the use of barium chloride is limited. It is a drug which is not immediately available in the operating room. It must be freshly prepared, and even then it is inferior to epinephrine.

D'Halliun first used calcium chloride for its direct myocardial effect. Experimentally he controlled ventricular fibrillation by the use of potassium chloride which caused arrest in diastole. Calcium chloride was then used to restore cardiac action. Other workers[57, 88, 109] who used it, notably Wiggers,[110] believed calcium chloride dangerous because it could cause ventricular fibrillation. Kay[109] has recently reported on its use combined with massage. He was particularly interested in cases of arrest following successful electrical defibrillation. He reported highly satisfactory results including some cases in which it was effective after epinephrine failed. Two to 4 ml. of a 10-per cent solution are used, combined with massage and injected into the left ventricular cavity so that it will immediately enter the coronary arteries. It would appear to have value in those cases in which epinephrine has failed.

As mentioned above, potassium chloride has been used as a 5-per cent solution to stop experimental ventricular fibrillation.[1, 57, 78, 85] It has not become popular because electrical defibrillation is more effective. Also, when it has been used the arrest which occurs requires calcium chloride for treatment.

As to atropine,[13, 16, 28, 33, 34, 46] the focus is on prevention of arrest by blocking vagal reflexes. Reid and Brace[13] stress the fact that vagal reflexes are far more important when the patient is under anesthesia and with abnormal hearts or under anoxic conditions. The role of atropine has been stressed by a number of authors.[16, 22, 28, 33, 34, 46] Scopolamine is apparently less effective than atropine.[23] Another very practical use of atropine is for the treatment of bradycardia during thoracic surgery. Such bradycardia is often the forerunner of arrest and should be appreciated as such. It is usually responsive to atropine. Indeed, nonresponse to atropine is a warning that asystole is imminent.[16]

Agents commonly regarded as respiratory or cardiac stimulants are useless in cardiac arrest, e.g., Nikethamide (coramine) and caffeine.[12, 57]

MORTALITY

Statistics given in various series are quoted in table 1. By complete recovery is meant that the patient left the hospital, although in some cases a neurologic residual was present. By partial success is meant that the heart was revived but the patient died shortly after the episode. The series of Stephenson and associates[24] is most interesting. This is the largest group ever reported and also is composed mainly of cases of the past 10 years. The larger series was published as reviews and contains a certain amount of duplication of cases.

COMPLICATIONS

Considering the excitement of the moment and that this is a procedure which is not done frequently by the individual surgeon, it is surprising that severe trauma to the heart does not occur often. To my knowledge only 1 case of cardiac rupture has occurred due to massage.[111]

In this incomplete review, no cases of empyema have been noted. Hanks and Papper[42] report 23 cases without pulmonary complications. They attribute this record to proper inflation of the lung following massage, underwater drainage of the pleural cavity, and antibiotics.

TABLE 1

Mortality in Cardiac Arrest

AUTHOR	YEAR	CASES	PARTIAL SUCCESS	COMPLETE SUCCESS	PER CENT COMPLETE SUCCESS
Ament[38]	1951	9		2	22
Bailey[112]	1941	41	13	4	10
Barber[2]	1945	143		48	33
Bartholomew[113]	1951	6		4	66
Becker[14]	1952	77		31	40
Bost[4]	1952	178		69	38
Cole[41]	1952	350		112	32
Cooley[12]	1950	48	33	12	25
Dale[5]	1952	12		2	26
Ehrenhaft[43]	1951	27	10	4	14
Green[6]	1906	40	8	9	22
Hanks[12]	1951	23	7	10	43
Johnson[83]	1951	20	10	8	40
Keen[7]	1904	27		3	11
Lahey[8]	1950	15		7	46
Lee[20]	1924	101		25	25
Stephenson[24]	1953	1200	336	336	28
White[10]	1909	50	14	10	20

POSTOPERATIVE COURSE

After successful cardiac massage, careful postoperative care is necessary. The patient will, of necessity, be unconscious for a variable length of time. The regimen must include the care of the unconscious patient plus post-thoracotomy routine. For cerebral edema Cole[114] has used serum albumin.

Certain patients present definite neurologic changes. In many, improvement will occur in the immediate postoperative period.[49, 52, 53, 58, 59, 115] Improvement in the late postoperative period may occur if a concentrated rehabilitation program is followed.[24] Ivory and Rinzler[52] report the use of glutamic acid for mental and neurologic residua with seeming improvement.

REPORT OF CASES

Case 1.* G. R., a 47-year-old Negro, was admitted to Gallinger Municipal Hospital on July 17, 1950 in acute distress from chest pain and dyspnea. He was an alcoholic and had been drinking heavily for 3 days. Fourteen hours prior to admission he had an episode of vomiting. Following the vomiting, he had a sharp epigastric pain which radiated to the left upper quadrant and left lower chest. The pain increased in severity. Dyspnea became noted 2 hours after the onset of pain.

The patient was acutely ill, markedly dyspneic, and apprehensive. The blood pressure was 90/60, the pulse rate 128, the respiratory rate 40, and the temperature 100.4°F. The heart and mediastinum were displaced to the right. The left lung was hyperresonant with decreased breath sounds. There was no subcutaneous emphysema or Hamman's sign. There was voluntary abdominal rigidity and tenderness over the upper quadrants. An X-ray film of the chest revealed a left hydropneumothorax. There was no mediastinal or subcutaneous emphysema. A thoracentesis revealed over 1,800 ml. of coffee-colored fluid.

The diagnosis was bronchopleural fistula or spontaneous rupture of the esophagus. It was planned to operate under local anesthesia, with preparation for a full thoracotomy if rupture of the esophagus was present. The patient refused surgery for approximately 9 hours. When consent was obtained the patient underwent a rib resection with local anesthesia. A free pleural space was found, and the diagnosis of spontaneous rupture of the esophagus was evident. Packs were placed in the thoracic wound and general anesthesia begun. Arrangements were hurried at this time. Sodium pentothal was used. Apnea occurred just prior to the passage of an endotracheal tube. Immediately after intubation the anesthetist informed the surgeon of the apnea, and the latter examined the heart through the operative wound and found that cardiac arrest had occurred. The wound was increased by an intercostal incision. Cardiac massage was begun. The heart responded with a feeble beat. The thoracic aorta was compressed to increase blood supply to the brain. There was a known period of cardiac arrest of approximately 2 minutes before normal cardiac contractions occurred. The surgeon proceeded with the thoracotomy. A rupture of the esophagus was found and repaired. At the end of the operation the blood pressure was 98/70 and the pulse ranged between 120 and 140.

The patient was comatose during the afternoon and early evening. Late in the evening he became violent, was irrational, and had to be restrained. The following day he was rational and answered questions intelligently. He had a complete memory loss for the day of surgery. The postoperative course was not remarkable. He required dilations for a postoperative stricture of the esophagus.

An electroencephalogram on the fourteenth postoperative day was reported normal.

Case 2. M.D., a 45-year-old Negress, was admitted to Gallinger Municipal Hospital on October 25, 1950. This patient had swallowed lye at the age of 2 years. She was treated at the time by gastrostomy and dilations. Throughout her childhood and teens she required dilations 1 to 3 times a year. During her adult life she obtained dilations only at irregular intervals, waiting until there was almost complete obstruction. In 1946 or 1948 perforation of the esophagus occurred during dilation, and a cervical mediastinotomy was performed.

During the year prior to admission to Gallinger she noted poor results with dilations. She underwent treatment 3 times a week but continued to have dysphagia and to lose weight. In the previous month she received daily dilations, presumably with pontocaine anesthesia. Because of lack of relief she came to Gallinger Municipal Hospital.

A physical examination was negative except for marked loss of weight and a healed right cervical incision. An X-ray film of the chest was negative. A barium swallow revealed "an obstruction to the barium at the level of T-2. There is an irregularity of the mucosal pattern approximately 10 cm. below the point of partial obstruction. There is a 'shelf-like' deformity at the point of obstruction."

A diagnosis of benign stricture was made, and on the day following admission the patient was taken to the operating room. Pontocaine anesthesia was used, and endoscopy was performed. At 5 to 6 cm. below the cricopharyngeus an irregular, friable inflammatory stricture was seen. Because of the possibility of a malignant lesion a biopsy was taken. Using soft dilators the area was dilated to a size no. 20 F.

The patient was given a string with attached lead shot to swallow. This was to be used as a guide for future dilations. Three days after the first examination the patient was returned to the operating room for esophagoscopy and dilations. The pharynx was sprayed with 2 per cent pontocaine. The patient was given 1 to 2 ounces of diluted pontocaine to use as a gargle. While doing so she fell backwards from the table and was lifted up and placed back on the table. Generalized convulsions occurred as this was done. The episode was diagnosed as a pontocaine reaction, and the nurse was sent for an intravenous barbiturate.

For an interval of approximately 30 to 45 seconds the pulse was regular and easily palpable. Respirations were irregular. In another 30 seconds the radial pulse disappeared. No cardiac sound could be heard by listening to the precordial area. The surgeon went to an adjoining room where an operation was in progress, seized a knife from the instrument table and returned. Fortunately an anesthetist was met who was informed of the situation. An incision was made in the fifth interspace, and the costal cartilage was cut. The heart was palpated; no beat could be noted. Cardiac massage was begun immediately. The anesthetist began to give positive pressure oxygen. An endotracheal tube was used when it became available. It was estimated that the circulation was interrupted approximately for 1½ minutes.

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* This case has been previously reported as a case of "Spontaneous Rupture of the Esophagus," Arch. Surg., 1952, **65**, 723.

Within 1 minute a peripheral pulse could be felt without massage, but a blood pressure could not be obtained. One-half ml. of epinephrine (1–1,100) was placed into the myocardium of the left ventricle. The cardiac impulse markedly increased. The blood pressure was recorded as 85/40.

Surgical preparation of the skin of the chest was made. One hundred thousand units of penicillin was instilled into the pleural cavity. An intercostal tube was placed. Cardiac contractions again became weak. Epinephrine was repeated, this time into the cavity of the left ventricle. The force of the heart beat increased and remained so. At the end of the procedure the blood pressure was 105/70. Spontaneous respirations occurred 1 hour after the onset of cardiac arrest.

The patient could be aroused that evening and would answer simple questions. The following day her main concerns were chest pain and the reason for a thoracic dressing following an esophagoscopy. She had no recollection of the previous day. There was moderate subcutaneous emphysema over the left hemithorax. During the postoperative course a serosanguineous pleural effusion required 2 thoracenteses. Cultures of the fluid were negative. The biopsy done previously was reported as squamous cell carcinoma. During the postoperative course an electroencephalogram was reported normal. Pressure on several occasions was exerted over the carotids without incident.

On the eleventh postoperative day bronchoscopy was performed under cocaine anesthesia. This revealed extension of the carcinoma into the tracheal floor.

X-ray therapy was given. A jejunostomy was performed.

The course was slowly downhill, and the patient died on December 22, 1950

Case 3. L. B., a 24-year-old white woman, was admitted to Valley Forge Army Hospital on February 4, 1952 with a diagnosis of rheumatic heart disease. At the age of 4 years she had had chorea, and this recurred intermittently until she was 14. When she was 7 her parents were told that she had a "leaky heart." Consequently, her activities were curtailed. In 1948 a diagnosis of rheumatic heart disease was made following an episode of pulmonary edema.

In 1951 the patient had a normal pregnancy and delivered spontaneously. Other than easy fatigue and dyspnea on exertion she noted no change during pregnancy. Several months following delivery she had another attack of pulmonary edema which led to this hospital admission.

On physical examination the condition of the heart was the only abnormality. There was a low-pitched crescendo, presystolic mitral murmur, terminating in an accentuated first mitral sound. There was no mitral systolic murmur. The second aortic sound was diminished.

Electrocardiographic findings were: "There is a normal sinus rhythm; there is no significant axis deviation. The auricular and ventricular rates are 60 per minute. The P waves are somewhat tall. The PR interval measures 0.24 second. The QRS complexes demonstrate vertical electrical position and are 0.08 second wide. The QT interval lasts 0.4 second. The ST segments are not significantly deviated and the T waves are normal."

An orthodiagram showed: "The heart as a whole is not enlarged. The pulmonary conus and left atrium are enlarged. The lungs are almost abnormally clear for this condition."*

On April 3, 1952 the patient was taken to the operating room for a mitral commissurotomy. Demerol (100 mg.) and atropine sulfate (1/100 Gm.) had been given 1 hour preoperatively. In the operating room the blood pressure was 100/70 and the pulse rate 114. Sodium pentothal induction was performed. Ether and oxygen were employed. Syncurine (3 mg.) was given intravenously, and the patient was intubated 10 minutes after the start of induction.

A continuous electrocardiographic recording was being made. When surgical preparation of the chest was started, ventricular tachycardia was noted by the cardiologist (fig. 1). In another 30 to 45 seconds a diagnosis of ventricular fibrillation was made. At this point a mottled type of cyanosis was noted. The anesthetist started Pronestyl into the infusion. An incision was rapidly made in the fifth interspace from the sternum to the anterior axillary line. The fifth cartilage was cut anteriorly. A rib spreader was inserted, and the heart was grasped in the right hand. It was beating feebly and irregularly. After 45 to 60 seconds of massage the heart spontaneously assumed rapid, regular contractions at 170 per minute.

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* Dr. John R. Urbach performed the preoperative studies in this patient.

Two small rents in the pulmonary parenchyma were easily repaired with catgut sutures. These had occurred during the thoracotomy incision.

The patient was given Cedilanid, 0.8 mg. intramuscularly. Pronestyl was continued; in all the patient received 200 mg. In 15 minutes the cardiac rate diminished to 120. One hundred thousand units of penicillin was instilled into the pleural cavity. An intercostal tube was placed. The chest wall was closed routinely.

The postoperative course was not remarkable. The patient was allowed to leave the hospital on April 17.

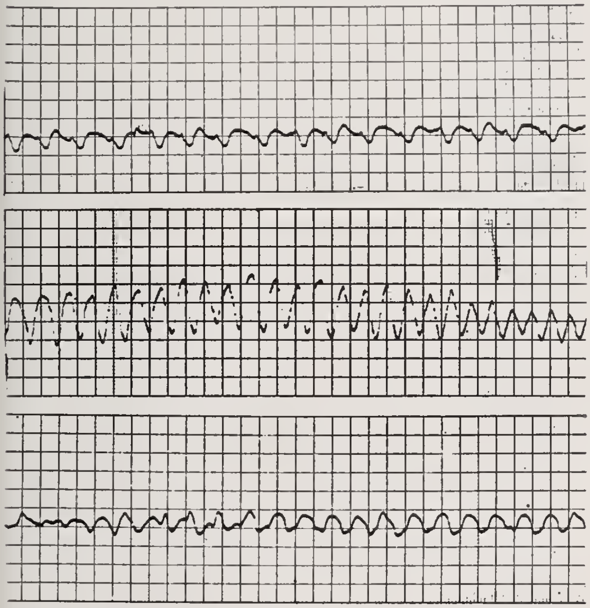

Fig. 1. Case 3. ECG during induction of anesthesia. Top strip shows ventricular tachycardia and the 2 lower ones ventricular fibrillation.

As planned, she was readmitted on May 14. Examinations showed no change from the previous admission. On May 22 a mitral commissurotomy was performed without incident. The patient left the hospital on June 8. She has been followed since surgery, and an excellent operative result has been obtained.

Summary

A definition and the historical aspects of cardiac arrest have been presented. The exact cause of each case of cardiac arrest cannot always be stated. Hypoxia and vagal reflexes are the most important factors. In the treatment, rapid thoracic approach and massage of the heart are necessary to prevent irreparable brain damage. Epinephrine in a dose of 0.5 ml. has a definite place in the treatment of standstill.

For ventricular fibrillation, massage, procaine or Pronestyl, and the electrical defibrillator are to be employed.

Three successful cases are presented including a case of ventricular fibrillation treated by the use of Pronestyl and massage.

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(*Continued on page 578*)

THE TREATMENT OF ACUTE RENAL INSUFFICIENCY*

GEORGE E. SCHREINER, M.D.

Instructor in Medicine, Georgetown University School of Medicine; Director, Renal Clinic, Georgetown University Hospital

BECAUSE the kidney has an effluent which we can see with the naked eye, we tend to think of it as a faucet, that is, something which is either on or off. This has been preserved in our thinking by placing the emphasis on the quantity of effluent rather than its qualities in relation to the body economy. Thus the term "anuric patient" comes easily to the tongue even though completely anuric persons rarely are seen, and the statement "this man is suffering from oliguria" is commonplace even though it has at most an indirect and limited clinical significance. Our thinking would be improved if we compared the kidney with the heart, for example. We say a man has cardiac insufficiency or failure after weighing his work load against his cardiac output. If we cannot increase the latter, we decrease the former and a cardiac-insufficient laborer becomes a cardiac-sufficient hemstitcher. The kidney differs only in the complexity of its function and in the fact that its output is important for its qualities rather than its volume. Thus the recent clinical terminology for renal failure has emphasized the physiologic rather than the morphologic approach to this subject, and such terms as "renal failure," "renal insufficiency" and "the ischemuric episode" have replaced "anoxic nephrosis," "lower nephron nephrosis" and other terms which are more pathologically than physiologically oriented.

The purpose of the present communication is to outline the causes of renal insufficiency in its broadest functional sense, and to consider briefly the principles involved in management of acute general renal insufficiency.

Causes of Acute Renal Insufficiency

Other terms:
- Acute renal failure—anoxic nephrosis
- Acute tubular damage—the ischemuric episode
- Lower nephron nephrosis—traumatic anuria

Group I: In which peripheral circulatory failure, "shock" or shocklike state dominates the etiologic picture

1. Trauma—especially massive wounds and multiple fractures
2. Head injury
3. Profound hemorrhage—placental separation, postpartum hemorrhage, ectopic pregnancy, bleeding ulcer, vascular injury
4. Severe anoxia
5. Carbon monoxide poisoning
6. Profound fluid loss as in intestinal obstruction or severe diarrhea

Group II: In which pigment excretion is the most dramatic feature

1. Crush syndrome
2. Incompatible blood transfusion
3. Blackwater fever
4. Transurethral prostatectomy with hemolysis
5. Heat stroke
6. Icterus neonatorum
7. Burns
8. Hemoglobinurias: cold, familial, march, etc.
9. Hemorrhagic fever
10. Sickle cell crisis

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Group III: In which directly nephrotoxic substances or sensitizing agents seem to be operating

1. Heavy metals: uranium, bismuth, mercury, phosphorus
2. Organic compounds: carbon tetrachloride, alloxan, cresol, uric-acid, mushroom, and black widow spider poisons
3. Sulfonamide sensitivity
4. Leptospirosis
5. Eclampsia
6. Serum sickness
7. Bacterial toxins: staphlococcus, meningococcus, typhus
8. Antibiotics: viomycin, bacitracin, etc.

GOALS OF MANAGEMENT OF RENAL INSUFFICIENCY

How do we manage those patients who have become involved in one or more of these conditions to the extent that their metabolic end-products and by-products exceed their general levels of excretion? The goals of such management should be to (1) reduce excess loading or, if possible, the normal loading of an insufficient renal function, (2) improve what renal function remains, (3) manage symptom-complexes by whatever means available, and (4) substitute for specific functions or use one of the technics available for partially selective removal of metabolic products. It goes without saying that progress toward these goals is more meaningful when the cause of the oliguria is accurately diagnosed. All specific and supporting measures should then be directed toward the identified cause. They should include vigorous treatment of shock or oligemia when present. Certain general measures, however, then may be taken to reduce renal loading or improve such function as remains. Such measures include:

1. *Hydration.* The estimated amount of water to cover insensible loss has been steadily diminishing with appreciation of the magnitude of metabolic water produced in these patients. Pediatric requirements range from 0.5 to 1.0 ml/Kg/hour, and adult requirements range from 0.2 to 0.6 ml/Kg/hour. A 154-pound man would thus be limited to a total daily intake of 800 ml. or less. Adjustments must be made for environmental temperature and humidity and for elevation of the patient's body temperature. After calculating the basic requirement, additional quantities are added for the visible losses in urine, excess sweating, diarrhea, vomitus, fistula drainage, and gastric or intestinal suction. Estimates are difficult for patients with seepage from burns or draining amputation sites. Clinical guides suggesting water deficit are: hyperthermia, thirst, lip-licking, and unexplained disorientation. Signs suggesting interstitial fluid deficit are: dry scaling skin, poor tissue turgor, dry and discolored tongue, soft eyeballs, hypotension, and a dull sensorium. The conventional laboratory guides, such as the hematocrit, the concentration of serum proteins and the concentration of serum electrolytes, are not altogether reliable in this condition and definitive data can be obtained only by the measurement of specific fluid compartments, e.g., T-1824, sucrose or inulin spaces.

2. *Reduction of the end-products of protein catabolism.* Most oliguric patients are best removed from all oral feeding and managed parenterally on a protein-free intake. This is designed to reduce the metabolic products of exogenous protein.

A minimum glucose intake of 100 Gm. daily must be insured to block ketosis and starvation gluconeogenesis from protein. It is, of course, necessary to include insulin in diabetics. An excess caloric intake is believed desirable but is still experimental. Oral and intravenous fat emulsions when developed may provide a practical method of high caloric feeding.

The use of anabolic hormones should still be regarded as experimental. Vigorous therapy of hyperthermia and infection which are the most common catabolic co-conspirators is the most important single goal of the clinician. Surgery and catabolic hormones (e.g., ACTH, cortisone) are to be avoided unless strongly indicated.

3. *Reduction in potassium load.* This is the most dangerous electrolyte and the derangement most apt to produce sudden death in the early phase of insufficiency. All the measures indicated for the reduction of protein catabolism are secondarily directed against hyperkalemia. One must avoid old bank blood containing hemoglobin or high potassium content in the plasma. Meticulous precautions must be taken against incompatible transfusions which release the large amounts of potassium contained in the red cell mass. Potassium-containing solution (e.g., duodenal replacement solution) must be avoided in the early phase, and protein hydrolysates are absolutely contraindicated.

Glucose infusions containing insulin (1 unit for each 3 Gm. of glucose) are useful temporarily but should not lull the clinician into a false sense of security. Continuous infusions of glucose tend to increase intracellular and decrease plasma potassium concentrations. But this is largely in liver and muscle glycogen and may be quickly released on subsequent glycogenolysis.

4. *Correction of acidosis.* This is best accomplished by giving the greatest possible portion of calories as carbohydrate to reduce ketosis. Alkali therapy may be used. One should not treat the CO_2 content for its own sake. When indicated, sodium bicarbonate and sodium lactate are the most commonly used. Dosage must be individualized. Many patients have organic acid excess which cannot be reversed by such therapy. They are merely rendered more hypertonic.

5. *Correction of calcium-phosphorus abnormalities.* We have on occasion employed Basejel or Amphojel, 20 c.c. by mouth 5 times daily, to reduce phosphate absorption in the intestine. Careful management is necessary to prevent tetany during attempted correction of acidosis. Supplemental calcium may be required.

6. *Management of uremic anemia and hemorrhagic manifestations.* These remain among the greatest of the unsolved therapeutic problems in this condition. Best results are achieved by a good response to general therapy. Patients may be kept moderately anemic. If necessary, transfuse carefully and reluctantly. Washed, packed cells are preferable. Cobalt chloride has been used experimentally and is still being evaluated. It has some dangerous potentialities.

If the patient shows continued worsening after these measures aimed at the most dangerous problems of acute general renal insufficiency, then one of the direct substitutions should be considered. Several technics have been used:

Induction of edema to dilute toxic metabolic products is justified occasionally when no other means is available but is at best a temporary and highly dangerous procedure.

Peritoneal irrigation takes advantage of a body membrane with a surface area comparable to the glomerular capillaries and a large blood flow. Nephrectomized dogs have been kept for many weeks with simple instillation of hypertonic glucose and its withdrawal after equilibration. More recent refinements have included plastic inflow and outflow catheters inserted through a trocar. A critical factor seems to be the use of intermittent irrigation without prolonging any single dialysis beyond 10 to 12 hours. The chief drawbacks are infection, the necessity of sterilizing large quantities of perfusion fluid, and general clumsiness. A flow of 1 liter per hour can achieve a concentration of urea in the effluent equal to 30 to 50 per cent of the plasma concentration. Improvements in technic and the use of antibiotics have altered the initially poor results of this method.

Gastrointestinal lavage has been done by several technics. The "Gavage-wait-and-pump-out-method" is inefficient, and large amounts of fluid may get beyond the pylorus and be absorbed. The double-lumen tube with continuous inflow and outflow is also inefficient. The danger of alkalosis is high. Irrigation of the entire small bowel with 1.8 per cent anhydrous sodium sulfate has been used. The sodium is considered to be in balance with the extracellular fluid, and the sulfate is relatively indiffusible. This may be a useful adjunct in managing potassium intoxication and is comparable to a full-blown diarrhea. The use of running enemas is obsolete and the least efficient method.

Exchange transfusion technic is similar to that used in erythroblastosis fetalis. An equivolumetric transfusion accomplishes 63 per cent exchange. Transfusion with twice the blood volume yields 80 per cent, and 3 times the blood volume yields 95 per cent exchange. The procedure is expensive and subject to frequent reactions. The potassium content of bank blood must be considered. Elevated temperatures have been noted for several hours following the procedure. It seems to be a catabolic stimulus, and improvement is followed by a rapid rise in urea nitrogen.

TABLE 1

Composition of the Bath Fluid

Chemical	Mol. wgt.	g./100 L	mEq./L	MOs/L*
NaCl.	(58.5)	600	102.5	205
$NaHCO_3$	(84)	290	34.5	79
KCL	(74.6)	30	4.0	8
$MgCl_2$	(95.2)	10	1.0	1.5
$CaCl_2$	(110.2)	18.5	1.3	
Glucose	(180)	200		100

* Arithmetical calculation without correction factor from critical tables.

Exchange resins have been used successfully to combat particular electrolyte abnormalities, most prominently the potassium intoxication. The principle of ion exchange was recognized in agricultural chemistry 102 years ago. Synthetic resins are polymers, usually of high molecular weight and with numerous cross links which make them almost insoluble. The polymer has numerous accessible exchange groups: amine groups in the anion exchangers and sulfonic or carboxylic groups in the cation exchangers. These materials may be used to take up specific cations such as potassium and sodium. They are bulky, not well tolerated by many patients, tricky to use without frequent laboratory control, and too slow for a sudden rise in serum potassium. Their most useful role may be in maintaining a patient after restoration to normal by dialysis.

The "artificial kidney" at the present writing is the most practical, most efficient and most clinically proven technic for removal of metabolic products. In strict terminology, it is not a kidney at all in that the most widely used model (the Kolff-Merrill apparatus) does not employ hydrostatic pressure for filtration, is not selective (it is bound by the laws of diffusion through cellophane), and cannot concentrate. It is simply a practical, efficient, and safe way of dialyzing blood and returning it to the body. Its flexibility lies in the ability to change the relative concentrations of solutes in the bath fluid. Merrill's group has performed over 290 dialyses in the past 4 years. The series includes 5 patients under 5 years of age and 14 over 70 years of age. There should be no mortality from the procedure itself in properly selected patients. However, external hemodialysis is by no means a casual procedure. It presents applied problems in clotting, hemolysis, bleeding, exsanguination, plethora, flow in the apparatus, leakage, sepsis, air embolism, water and electrolyte balance, temperature control, and the comfort and morale of the patient.

TABLE 2

Chemical Changes Following 6-hour Dialysis

Upper figures: 37-year-old male, chronic glomerulonephritis, weight 65 Kg. Lower figures: 5-year-old male, acute glomerulonephritis, hemolytic reaction, weight 25 Kg.

Test	Units	Before	After	% Previous value
Urea Nitrogen...	mg. %	172	49	29
		253	53	21
Potassium	mEq./L	6.2	4.7	76
		8.0	4.4	55
Sodium	mEq./L	124	136	109
		128	142	111
Chloride	mEq./L	77	105	136
		88	103	117
Phosphorus	mg. %	25.7	6.6	27
		11.5	4.3	37
Creatinine	mg. %	33	12.6	38
		18	5.0	27
Hematocrit	%	20	20	100
		30	26	87
Total Solutes	m-osmols*	314.4	283.6	90

* Freezing point depression.

In a large medical center it is economically feasible and is a clinically reliable method in the hands of a trained team. In the past 3 years many patients with various forms of renal insufficiency have been managed at the Georgetown University Medical Center. External hemodialysis has been performed 42 times by means of the Kolff-Merrill apparatus. There have been several modifications made in the composition of the standard bath fluid. In addition, deliberate alterations are frequently made, based on the blood chemical factors of the patient. The most recent standard bath composition is shown in table 1.

Since the rate of removal of a substance from blood coursing through the artificial kidney is directly dependent on blood flow and on the concentration gradient between blood and bath, it is customary to change the bath at least once during the conventional 6-hour dialysis. A. V. Wolf has calculated that 1 bath change increases the total amount of urea removed by 16 per cent, 2 bath changes by 20 per cent, and an infinite number of changes by about 31 per cent. Actual chemical changes in the blood are quite dramatic following a 6-hour dialysis. The chemical changes in the cases of 2 representative patients are presented in table 2.

Improvement in sensorium and subjective symptoms may occur soon but usually are most striking 36 to 48 hours after dialysis. Clinical improvement is less rapid in the patients with chronic renal disease.

SUMMARY

1. Renal insufficiency is presented from a physiologic aspect, and the causes of acute renal insufficiency are classified.

2. The principles behind the conservative management of acute renal insufficiency are outlined.

3. Technics for removal of metabolic products are reviewed with special consideration given to the artificial kidney. Illustrative results of this method are presented.

FLUID AND ELECTROLYTE THERAPY*†

Physiologic and Clinical Aspects

LOUIS K. ALPERT, M.D.
Adjunct Clinical Professor of Medicine

ERNEST COTLOVE, M.D.
Research Associate in Medicine

ALVIN E. PARRISH, M.D.
Clinical Instructor in Medicine,
George Washington University School of Medicine

Physiologic Considerations

THE regulation of the extracellular fluid is concerned with the precise maintenance of (1) total osmotic concentration, (2) total volume, and (3) composition, including the pH and the concentration of individual constituents. In table 1 are listed the normal values for total body water, and the concentrations of sodium, potassium, chloride and bicarbonate.

TABLE 1

Normal Values of Body Water and Electrolyte Concentrations

Compartment	H_2O	Na	K	Cl	HCO_3
	Per cent Body Weight	*Milliequivalents per liter*			
Extracellular	(Plasma) 5 (Interstitial) 12	135 147	3.5 4.7	100-105	24-30
Intracellular	43	10 14	160	0-5	0-2

The organ of regulation is the kidney, by virtue of its ability to alter the excretion of water and individual electrolytes to meet changing conditions. Although the skin and gastrointestinal tract are routes of potential losses of water and electrolytes, these organs are not primarily involved in regulation. The kidney maintains the osmotic concentration of the extracellular fluid by adjustment of water excretion, and the volume by variations in sodium excretion, since the total amount of sodium in the body is the essential determinant of the extracellular fluid volume. It aids in the control of the pH by the production of a more acid or alkaline urine, as may be required, and of the normal concentrations of potassium and other substances by variations in their excretion.

The excretion of water by the kidney is dependent on (1) the filtration rate, (2) the mechanisms influencing reabsorption of solutes, and (3) the specific system controlling water reabsorption. Of the large volume of filtered water with its contained solutes (about 180 liters per day), approximately $\frac{7}{8}$ is reabsorbed by the proximal tubules. The solutes, including both electrolytes and non-electrolytes (Na, Cl, glucose, etc.) are reabsorbed actively by specific cellular mechanisms, while the water follows passively in accordance with osmotic forces. If the amount of solute filtered exceeds the reabsorptive capacity of the tubules, the back-diffusion of water is reduced, and an osmotic diuresis results. Mercurial diuretics, by specifically inhibiting the activity of the tubule cells in the reabsorption of sodium and chloride, produce essentially an osmotic diuresis. The administration of large amounts of saline has a similar effect.

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† From the Department of Medicine, George Washington University School of Medicine; Veterans Administration Hospital, Washington, D. C.; and the Laboratory of Kidney and Electrolyte Metabolism, National Heart Institute, National Institutes of Health, Public Health Service, Department of Health, Education and Welfare, Bethesda, Maryland.

In addition to the osmotic factors, the excretion of water is under the direct influence of the antidiuretic hormone of the posterior pituitary gland. The primary stimulus which affects the secretion of this hormone is a change in the osmotic concentration of the extracellular fluid. The quantity of water reabsorbed in the distal tubules is related to the amount of circulating antidiuretic hormone. When this is decreased or absent, water is retained in the tubular lumen, resulting in a dilute urine, as in water diuresis. This portion of water reabsorption (about 10 to 15 per cent of the total) is thus under hormonal control, and has been termed active or facultative water reabsorption.

A marked decrease in glomerular filtration rate exposes a smaller volume of fluid to the tubules, and tends to promote greater reabsorption of water and solutes, whereas an increased glomerular filtration rate has the reverse effect. In some cases of renal disease, particularly chronic nephritis, the reabsorption of solute and water by the tubules is impaired, with resultant diuresis similar to an osmotic diuresis. When the sodium component of this solute is pronounced, the syndrome is termed "salt-losing nephritis." If the concentration of anions in the glomerular filtrate, such as Cl from administered NH_4Cl or $CaCl_2$, PO_4 and SO_4 from increased protein catabolism, or ketone acids in uncontrolled diabetes mellitus, exceeds the reabsorptive capacity of the tubules, an increased amount of water is carried with them, as well as some of the cations, including Na, K and NH_4. An increased loss of electrolytes may also occur with the osmotic diuresis produced by a rise in urea or glucose excretion.

Of the large amounts of sodium filtered by the glomeruli, more than 99 per cent is reabsorbed by the tubules. The acidification of the urine is related to this process in that H-ion is secreted by the tubules in exchange for part of the Na absorbed. The urinary output of sodium is decreased in circulatory failure, and after the administration of adrenal cortical and gonadal hormones, which increase tubular reabsorption of Na.

The excretion of potassium differs from that of sodium and water, in that it is determined not only by glomerular filtration and tubular reabsorption, but also by tubular secretion. Usually, the amount of K excreted in the urine is about $\frac{1}{10}$ of that which is filtered by the glomeruli. However, the potential range of K excretion is wide, from zero to 200 per cent of the amount filtered, depending on variations in tubular secretion and reabsorption. The excretion of K is increased by (1) the adrenal cortical hormones, (2) increased anion concentration in the urine, (3) osmotic diuresis (urea, glucose, etc.), (4) mercurial diuresis, (5) plasma alkalosis, (6) certain drugs, such as sulfanilamide and some of its derivatives, which inhibit the action of the enzyme carbonic anhydrase, and in some cases of chronic nephritis. The excretion of K is decreased in (1) adrenal insufficiency and (2) some forms of chronic renal disease.

When excessive amounts of potassium are lost from the extracellular fluid, beyond that which is replaced from exogenous sources, a transfer of K from the intracellular to the extracellular compartment frequently takes place, with replacement of the intracellular K by Na.

For a more detailed exposition of the subject the reader may consult references 1 and 2.

Clinical Aspects and Therapy

Two major types of derangements of body fluids are (1) increase or decrease in extracellular fluid volume, and (2) increase or decrease of extracellular fluid tonicity (total osmotic concentration). In clinical practice any combination of these changes may be seen.

An important clinical syndrome occurring in a wide variety of conditions is that associated with salt (Na) depletion and a contracted extracellular fluid volume. The loss of Na is usually greater than that of water, with a resultant low plasma sodium concentration and hypotonicity, although plasma Na may sometimes be normal or even increased. The reduced extracellular fluid volume is the essential basis of the clinical picture, which includes hypotension, weakness, apathy, tachycardia, anorexia, vomiting, abdominal and muscle cramps, loss of skin turgor, oliguria and nitrogen retention. Thirst is usually absent, unless there is associated hypertonicity. This syndrome results from sodium depletion occurring in Addison's disease, diabetic acidosis, diarrhea (particularly in infants), gastrointestinal fistulas and drainage, burns and trauma, heat exhaustion, "salt-losing" nephritis, and overtreatment with mercurial diuretics and ion-exchange resins in patients with congestive heart failure on a low-salt diet, particularly in the absence of appreciable edema. The salt-depletion state can usually be corrected by the administration of 1 to 2 liters (more in severe depletion) of Ringer's lactate solution. This should be given cautiously in patients with cardiac or renal disease. In the presence of marked hypotonicity, hypertonic sodium lactate solutions may be used.

Hypertonicity of the extracellular fluid, as in dehydration associated with the loss of water alone, produces the symptoms of thirst, fever and scanty urine, with normal blood pressure. The giving of water without electrolytes produces rapid restitution.

TABLE 2

Estimation of Daily Water and Electrolyte Requirements

Source	Volume	Water	Na	K	Cl
	Liters	*Liters*	*mEq.*	*mEq.*	*mEq.*
Insensible (skin, lungs)	1.0	1.0	0	0	0
Urine	1.5 (desirable)	1.5	40	40	20
Sweat:					
Moderate (fever)	1.5	1.5	45	1.5	30
Severe (drenching)	2.5	2.5	100	5	85
Vomitus	(measure)	(equal to volume)	(× 50)	(× 12)	(× 125)
Duodenal drainage	(measure)	(equal to volume)	(× 130)	(× 10)	(× 80)
Diarrhea	(measure)	(equal to volume)	(× 50)	(× 50)	(× 50)
Minimum daily requirement	2.5	2.5	40	40	20
Additional	measured	equal to volume	as calculated	as calculated	as calculated

Retention of Na and water results in expansion of the extracellular fluid volume and is manifested by edema. This occurs in congestive heart failure, hepatic cirrhosis, renal disease, or after the excessive administration of adrenal or gonadal hormones. The tonicity of the extracellular fluid may be normal, but more frequently it is slightly or moderately reduced. Symptoms are caused by the expanded fluid volume rather than by the altered tonicity. Therapeutic measures are aimed at reducing the intake of Na, and promoting its excretion.

The maintenance of a normal water and electrolyte balance over a prolonged period in seriously ill patients can be accomplished only by the daily estimation and measurement of the losses which occur, with accurate replacement. To facilitate this, a chart such as illustrated in table 2 can be used. The "insensible" loss of water through the lungs and skin amounts to 1 liter per day. The urinary output should be maintained at 1 to 1½ liters per day. Therefore, the minimum daily requirement for water alone is 2 to 2½ liters. Some patients continue to have low urine output despite adequate water intake, and intake must then be reduced to avoid water intoxication. The loss of water associated with moderate fever and perspiration is estimated as 1.5 liters, and with severe sweating as 2.5 liters. The losses of fluid from vomiting, gastric or duodenal drainage, biliary fistula, or diarrhea must be measured during each 24-hour period and replaced in equal volume with the appropriate electrolyte content, in addition to the basic losses mentioned above.

An understanding of the term "milliequivalent" is essential in the management of electrolyte equilibrium. Equivalence, in a chemical sense, indicates that an ion has the capacity of combining with 1 hydrogen ion, or can replace 1 hydrogen ion, as is the case with Cl or Na. Thus, Na and Cl are equivalent in combining power, even though the atomic weight of Na is 23 and of Cl is 35.5. Isotonic saline contains 880 mg. per cent of NaCl, of which 345 is Na and 535 is Cl. Yet the equivalent concentration of each ion is the same, 150 mEq. per liter. In a similar isotonic solution of KCl the amount of K (atomic weight 39) would be 585 mg. per cent, but the milliequivalents per liter would still be 150, the same as the Cl. A formula which may be used for the conversion of milligrams per cent to milliequivalents per liter is as follows:

$$\text{mEq./L} = \frac{\text{mg. \% } \times 10 \times \text{valence}}{\text{atomic weight}}$$

In the calculation of replacement requirements, knowledge of the electrolyte composition of the most commonly used intravenous solutions, as shown in table 3, may be helpful.

TABLE 3

Composition of Intravenous Solutions

Solution	Electrolytes mEq. per liter		
	Na	K	Cl
Ringer's lactate	130	4	109
Normal saline	150	0	150
M/6 Na lactate	167	0	0
KCl (10 c.c. ampoules)	0	20 per amp.	20 per amp.

These may be manipulated in various combinations, and additional K may be supplied from sterile 10 c.c. ampoules of KCl, each containing 20 mEq. of K. If potassium is administered intravenously, the rate should not exceed 20 mEq. per hour.

The electrocardiogram is not a reliable index of the concentration of potassium in the extracellular fluid. Other factors, including the relative concentrations of potassium to those of other extracellular ions, and possibly to those of intracellular ions, may affect the electrocardiogram. Serial ECG's may be of some value, in that a change in the configuration of the T waves in an upward direction might be indicative of a rise in K concentration in the extracellular fluid, whereas progressive decrease in height of the T waves, or inversion, would suggest a fall in K level. Prolongation of the P-R and Q-T intervals, as well as the development of arrhythmias, may occur with either hyper- or hypopotassemia.

Specific Treatment of Certain Conditions Associated with Derangement of Water and Electrolyte Balance

1. Congestive heart failure, cirrhosis of the liver, and nephrotic phase of nephritis (water and Na retention)
   a. Restriction of salt intake to less than 1 gram per day
   b. Mercurial diuretic as required. Diuresis can usually be potentiated by oral NH_4Cl, 1 to 2 Gm., 3 times daily, on the day preceding and day of injection.
   c. Cation exchange resin, 10 to 15 grams, 4 times daily. This removes approximately 1.2 mEq. of Na per gram of resin.
2. Sodium depletion (reduced extracellular fluid volume) in heat exhaustion, excessive mercurial diuresis, and Addison's disease
   1 to 2 liters of Ringer's lactate solution in moderate depletion, up to 4 liters if severe
3. Simple dehydration (loss of water only)
   1 to 2 liters of 5 per cent glucose in water
4. Concurrent replacement in excessive vomiting (mainly loss of water and Cl, less of Na and K)
   Travert 10 per cent—Electrolyte No. 3

(Baxter) or Solution G (Abbott), equal to volume of vomitus lost

5. Concurrent replacement in excessive diarrhea (loss of water, Na and K)
   ⅓ liter of Ringer's lactate solution, and ⅔ liter of 10 per cent glucose in water with 40 mEq. of K added for each liter of diarrheal fluid lost.
6. Duodenal and biliary drainage (mainly loss of Na, less of Cl and K)
   Ringer's lactate solution, equal to volume lost
7. Chronic nephritis
   a. Loss of Na, retention of K, acidosis
      500 c.c. M/6 lactate plus 500 c.c. normal saline, and 1 liter of 10 per cent glucose
   b. Loss of both Na and K, acidosis
      Same as above, with addition of 40 mEq. of K to the glucose solution
8. Diabetic coma (loss of water, Na and K)
   1½ liters of Ringer's lactate, and 1½ liters 10 per cent fructose in water with 40 mEq. of K added if urine flow adequate
9. Lower nephron syndrome (acute renal insufficiency)
   a. Oliguric phase (no losses of electrolyte, except by vomiting or diarrhea)
      1,500 c.c. of 10 per cent glucose in water daily. If vomiting or diarrhea occurs, Ringer's lactate solution, in amount equal to volume lost, is added
   b. Diuretic phase (loss of water, Na, Cl and K)
      ⅓ liter of Ringer's lactate solution and ⅔ liter of 10 per cent glucose in water, for each liter of urine output
10. Major surgery (mainly loss of water and K, less of Na)
    ⅓ liter of Ringer's lactate solution, plus 2 liters of 10 per cent glucose in water with 20 meq. of K added to each, as a daily maintenance, in addition to replacement of other losses.

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THE DISSOCIATIVE REACTIONS*

Dissociation, Double Personality, Depersonalization, Amnesia, Fugue States, Somnambulism, and Hypnosis

HENRY P. LAUGHLIN, M.D.†

Assistant Clinical Professor of Psychiatry, George Washington University School of Medicine

THE dissociative reactions are a group of interesting and sometimes bizarre psychologic phenomena. Although certain of this group, such as the alternating or double personality, are indeed rare, they are none the less genuine. Because of their unusual features they are apt to attract a great deal of interest, both public and professional, sometimes out of proportion to their real medical importance. In cases of amnesia and fugues, medicolegal problems arise because this particular type of flight from intolerable emotional conflict takes place either automatically and unconsciously or is simulated or claimed as a consciously attempted evasion of the consequences of criminal acts.

Dissociation itself is a common enough process which, as we shall see, can serve quite useful and constructive purposes as well as merge into the pathologic. Included here for convenience in discussion and as an example of a dissociative process, hypnosis is likewise a relatively common phenomenon, although at times under a cloud of doubt or mysticism through its association with, or use by charlatans and mystics, and occasionally unethical persons, and as a medium of entertainment. Although the value of hypnosis as a possible therapeutic tool is greatly limited, it has some legitimate place in research.

Indicative of the need for clarity in differentiating this group of conditions and in recognition of their importance, the latest classification[1] of the American Psychiatric Association, duly incorporated in the A.M.A. Standard Nomenclature[2] has recently made the dissociative reactions a separate and distinct diagnostic entity.

Dissociation

Dissociation is the name for the psychologic process in which there is division of the mind into two or more parts which have the capacity to function more or less independently. Dissociation may be partial and temporary. It may serve a useful purpose as illustrated in the following examples:

Case 1. A business man has for a long time made several trips each week to Frederick and Hagerstown. He is an excellent driver who has become thoroughly familiar with the route. As a result, he reported that he has been able much of the time to reduce his driving to a semi-automatic process, leaving a considerable segment of his attention safely free to plan business operations en route.

Case 2. An automobile assembly line worker developed a plot for a novel while performing his required tasks on the assembly line.

Case 3. A professional window-washer reported the fantasies he had indulged in, and personal planning he had accomplished, while performing his usual activities many stories above the street. His work had become sufficiently routine to allow an amount of his attention to be devoted elsewhere without untoward effects on his primary occupation, or danger to himself.

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* This paper is the second of a series planned to cover the psychoneuroses. The next in the series, "The Conversion Reactions," is planned for the November issue of the MEDICAL ANNALS.

† In private practice of psychiatry and psychoanalysis, Chevy Chase; Attending Staff, Walter Reed Army Hospital; Consultant to Office of the Secretary, Department of Health, Education, and Welfare and to the National Institute of Mental Health.

When two activities can be usefully and safely carried on simultaneously, the process of dissociation is helpful and constructive. Most of us learn ways of putting this to personal use. We may be already aware of these or they might be noticed upon closer self-observation. Although these examples are neither pathologic nor harmful, instances may be observed in which the area requiring primary attention is replaced by the secondary one. The resulting inattention can lead to damage, as illustrated in the following case.

Case 4. A young college professor was in the habit of carrying on discussions with a colleague while driving to his university. These discussions were often highly technical and involved. One morning the conversation was particularly animated and engrossing. Turning to his companion to make a specific point, he failed to notice the sudden stop of the car ahead and a fairly serious collision resulted.

Dissociation can vary in its expression from a constructive partial dissociation of the stream of consciousness to a nearly complete splitting, resulting in the marked pathology of gross personality disorganization. Dissociation is also used as a descriptive term to describe "the breakoff of the normal relationship between thoughts and feelings" seen typically in schizophrenia.[3] In this condition there is an apparent "separation of the intellectual and emotional processes," so that the emotional expression is inappropriate and often diminished. Sometimes the term is also used to describe the dissociation from reality in schizophrenia.

Rarely, dissociation to a dramatic degree takes place abruptly in an apparent case of neurosis in response to a sudden psychologic threat. An example of this occurring with a patient in early psychoanalytic treatment, together with the analyst's effective emergency treatment of the episode, follows:

Case 5. A 26-year-old single woman had a strong, but consciously abhorred and rejected, attraction toward an actively homosexual girl friend. Following the departure of the latter for a job in Tokyo some 18 months earlier, however, the intense conflict had seemingly been solved. One day the patient received a cable announcing the imminent but unexpected return of her friend by air with a request that she make room for the friend in her apartment. Her response to this sudden reactivation of an intense conflict was to completely dissociate from reality. She became partly disoriented and could not carry on a coherent conversation. An alarmed friend quickly brought her for an emergency consultation, but after some effort on the part of the analyst her verbal productions continued to make little sense. Finally, calling in the friend, the physician told her in all seriousness, but also in the patient's hearing, that he had done all he could; that the rest was up to the patient, and if the friend found her unmanageable the only recourse was immediate hospitalization. This information was sufficiently poignant to penetrate the protective dissociation which dramatically fell away, allowing a resumption of communication. She became able to recognize and to "face" her conflict in a more constructive fashion.

One may separate dissociative processes into 2 general types, the side-by-side and the alternating. The side-by-side type is illustrated in the examples above (cases 1 through 4), in which 2 apparently independent activities take place simultaneously in dissociated fashion, usually without undue effects. The alternating type is illustrated in case 5 and also by later cases illustrative of sleep-walking, amnesia and fugue states, and in the so-called double personality. Here one part of the personality "takes over" or replaces another. It is as though the flow or stream of consciousness was abruptly halted and replaced by a new one. Obviously, alternating dissociation of consciousness is the more drastic and is more apt to indicate serious trouble.

Thus, we can see how, when certain dissociative processes progress without untoward effect they can be highly useful, freeing our minds for additional purposive and constructive thinking and planning while the automatic or semi-automatic primary activity continues without apparent conscious effort. In this manner, each dissociated part may carry on its complicated process relatively independent of the other.[4] I shall limit use of the dissociative reactions as a diagnostic category to those emotional illnesses in which the phenomenon of dissociation is the most prominent feature. This is our diagnostic yardstick in determining the most appropriate diagnosis in the emotional illnesses of neurotic level.

THE ALTERNATING OR DOUBLE PERSONALITY

This type of phenomenon is one of the most spectacular and dramatic psychologic reactions. The alternating personality is dramatized by authors, the classical example of which is the Dr. Jekyll and Mr. Hyde of fiction. Actually, the existence of this most extreme, complete and drastic type of dissociative phenomenon is rare. There are, however, a few authenticated cases in the literature for the student who wishes to pursue this matter further, e.g., Morton Prince's famous case, Sally Beauchamp of Boston, reported at the turn of the century.

Prince's case and a few others reported are little less dramatic than Stevenson's characters. In general, the person displaying this alternating type of personality carries on two or more completely separate and distinct existences. For example, the physician may become a shop-keeper with no memory for his former state or life. He may even function quite effectively in the new role. Reversion may be precipitated by important (to him) physical or emotional events. At this juncture the old personality reasserts itself and the victim is amazed to "find himself" in an "unfamiliar" situation. He is at a loss to explain what has occurred or the meaning of his current activities, dress, etc.

In view of the small likelihood of personal experience with this unusual manifestation of complete alternating dissociation, a more exhaustive discussion is not warranted here.

DEPERSONALIZATION

Depersonalization is the name for a reasonably common subjective feeling and psychiatric symptom which is dissociative in character. These feelings are perhaps best described as feelings of unreality. They may vary from almost unnoticed to very severe, and from fleeting and rare, to prolonged and frequent.

Depersonalization may be experienced and reported as feelings that things seem unreal, or that the person is no longer himself. The patient may have feelings that he has changed; that he has become someone else; or that part or even all of the external world is unreal.[3]

Fleeting feelings of unreality (depersonalization) are not an uncommon experience and are not necessarily indicative of illness. In its more marked form, however, depersonalization is seen in various types of emotional illness, reaching its ultimate form as a definite pathologic feature in certain cases of schizophrenia.

AMNESIA

Amnesia is the medical term for loss of memory. It might also be defined as pathologic (morbid) forgetting. Amnesia may be sharply circumscribed as to specific events or as to time. On the other hand, it may be diffuse and spotty for scattered incidents.[3]

The diagnosis of true amnesia may be difficult, particularly in cases in which there are medicolegal implications or a large element of possible "secondary gain." In cases in which physical factors (age, senility, trauma, cerebral lesions and alcohol) are apparently etiologic contributors, the amnesia is less surprising, and diagnosis may offer little trouble. Those cases of amnesia, particularly those in which the dissociation is alternating and fairly complete and the precipitating factor entirely or largely psychologic, must be carefully evaluated on the basis of clinical study and may require the most experienced judgment. In some instances, the diagnosis of amnesia as an unconscious (out-of-awareness and out of voluntary control) psychologic event may actually become a matter of degree.

The incidence of amnesia as a response to trauma, aging, alcoholic overindulgence, etc. is not rare. Cases which approach the fugue state or the alternating personality in completeness of dissociation are much more infrequently seen.

Amnesia is always a response to a physical or a psychologic event or a combination of both. Amnesia may represent a way of escape or flight from intolerable emotional conflict. Thus, when a situation or series of events becomes intolerably difficult or painful to the individual who already possesses the predisposing psychologic diathesis for this type of dissociative escape, amnesia results. The amnesia attempts to subserve a protective function and in so doing may well become the presenting pathologic feature.

Actually, the forgetting of emotionally painful events is an almost continual protective psychologic process. This process is particularly active in the early years of life. Nevertheless, the general tendency with painful experiences is that regression (the relegation of emotionally disturbing and painful material to the unconscious) is intermittently continuous throughout life. Indeed, were it not so, the cumulative effect of our individual emotional traumata would soon be overpowering. However, with most persons certain painful experiences appear conversely to be acutely retained in memory. This apparent selectivity of painful emotional data which are "lost" (repressed) as opposed to those retained and the reasons for it are imperfectly understood.

The protective and restorative value of sleep lies partly in its facilitation of the forgetting process.[5] The stress and tensions of the day, the memories of disturbing events, and failures and dissatisfactions of the immediately preceding waking hours are dulled or lost. This purpose of sleep is perhaps at least as important as its value in a physical restorative sense.

Generally the patient is aware of his memory loss. There is comparatively little concern evidenced, particularly when the amnesia serves a protective function. In the spotty amnesia frequently seen with advancing years, there may be considerable concern, but there may also be irritability and denial. There are a number of types of amnesia.[3] Four of these are worthy of listing.

1. Anterograde amnesia—amnesia extending forward in time from the precipitating event.

2. Emotional amnesia—amnesia primarily emotional in origin (as a "flight" response to intolerable emotional conflict).

3. Retrograde amnesia—amnesia extending backward in time from the precipitating event.

4. Traumatic amnesia—amnesia following physical injury, usually a blow on the head with concussion.

The following example illustrates the usual retrograde nature of amnesia following trauma and the emotionally protective function it can subserve:

Case 6. A mother and father and their 2 children, girls aged 10 and 12, were making a motor trip through Virginia. While traveling at about 50 miles per hour, their car collided with a truck. Everyone in the car suffered injury. Of the girls, the younger but not the older child was knocked unconscious. In fact, the younger child suffered the greatest physical injury but retained no memory of the collision and on recovery seemed to have suffered few untoward emotional consequences. The older child, however, was relatively less fortunate, since, despite her minor physical injuries, she remembered in detail the painful events of the collision. In consequence, she suffered from nightmares as well as other indications of gross anxiety, and was afraid to ride in a car for several months thereafter. Remnants of anxiety were in evidence after 6 months, subsiding then during the course of a short series of psychotherapeutic consultations.

From the above incident one could conclude that the amnesia following the accident was emotionally protective for the younger child. This example also helps point out how the emotional sequelae of trauma can be much more troubling and serious than the actual physical injuries which occur.

As noted earlier, amnesias are also a consequence of psychologic trauma. It is common for the psychiatrist to hear patients recall "forgotten" memories of painful situations or events in early life. In this instance the circumscribed amnesia is, of course, the result of repression. The successful therapeutic endeavor has resulted in the release of the data to conscious recall. This is termed derepression.

Amnesia, at least until recently, tended to rival the plea of insanity as a defense in certain medicolegal cases. When amnesia might be regarded at least as a mitigating circumstance in a case, careful evaluation by experts may well be indicated in view of the stimulus of this secondary gain to purposeful or partly conscious malingering. The following example illustrates the type of problem which can be encountered.

Case 7. A 26-year-old defendant was positively identified as one of 3 men participating in a hold-up which involved murder. He made no attempt to deny being present. His defense rested largely on a claimed amnesia for the entire event, including his companions or any association with them. To the extent accepted by the jury he was by implication denying responsibility. Psychiatric examination on behalf of the court indicated considerable doubt as to the validity of the defendant's contention. He was ultimately convicted.

Some degree of retrograde amnesia accompanies most head injuries. This may spontaneously clear up in time but may also partially or wholly remain. Treatment is seldom indicated. The cumulative effects of repeated head blows seen in boxer's "punchiness" may show scattered amnesia, but this is not the most prominent feature of the syndrome. The amnesia following an alcoholic binge is more a reflection of the individual's underlying personality than any specific property of alcohol per se. A certain amount of spotty amnesia is an expected but greatly variable accompaniment of aging. More likely to involve recent (as opposed to remote) events, this retrograde amnesia reaches its greatest development in certain cases of arteriosclerotic and senile psychoses.

Amnesias and fugue states must sometimes be differentiated from organic confusion. At times the withdrawn and noncommunicative patient suffering from an acute schizophrenic episode must be also differentiated from an amnesia victim.

Some memory loss can be demonstrated in most patients following electric shock treatment. There is no universally accepted explanation for the benefits which may accrue to some patients treated by electric shock. My personal theory is that the memory loss is a most important factor. Memories, particularly those of recent events which may have been of significance in the precipitation of the emotional disorder, are most likely to be eliminated. If some of these "straws that broke the camel's back" are removed, improvement can follow.[4] This may explain the relative efficacy of electric shock treatment in some acute cases, as opposed to indifferent or poor results in the more chronic cases. In the latter the precipitating events would have receded from the more vulnerable area of recent memory.

In a case of a "normal" person given electroshock, Alexander[6] recently reported persistence of post-shock amnesia for an emotionally disturbing traffic accident which had occurred on the morning of the ECT. Even after 10 days when the incident was finally recalled to him, it appeared to have lost emotional significance.

Treatment of amnesia is indicated in cases in which the memory loss has occurred as the pathologic attempt at flight. Therapy is directed toward the return to consciousness of the forgotten memories. The conflicts involved must be recognized and brought into conscious awareness for study. Only in this way will it become possible to attempt more constructive solutions upon a more realistic basis.

Fugue States

A fugue is a dissociated state characterized by amnesia and usually by personality disorganization. The victim may appear confused, and his activity is less organized and purposeful than in double personality or in certain amnesia states. Fugue is derived from a French verb meaning wild or confused flight. Appropriately, a fugue is a somewhat disorganized but complete dissociative flight from reality in which the patient may wander about aimlessly and appear lost. The duration of a fugue may be from days to months. The following is an example of a fugue state in which careful study revealed the essential factors in its pathogenesis.

Case 8.* Some days after a young air force cadet disappeared from his base during World War II he turned up many miles away in Oklahoma City where he had been discovered wandering aimlessly around the streets, amnesic, and unable to identify himself. When his identity was discovered he was hospitalized at Randolph Field where intensive study revealed the following basis for an intolerable conflict and also recovered the initiating suggestion.

He had been interested in aviation since childhood. He had long wanted to become a pilot, a vocation which was a means to bolster his self-esteem, and to become a hero. He had identified himself with a famous World War I ace. During the war he was successful in gaining admittance to an Air Force training base. However, as an air cadet he developed a hatred of flying and became extremely fearful of it. With each training flight he became anxious, nauseated and sick. After much indecision, he made efforts to be grounded, which were, however, not successful. He advanced various reasons why he should give up flying, but these were not particularly impressive to his instructors, who paid little attention to him. It was approximately at this time that the cadet read by chance an article in the newspaper about a case of an amnesia victim, a woman in Hollywood, California, who was being sued for divorce by her husband because of infidelity. The woman claimed amnesia for the events of her extramarital experiences. Some days later the cadet disappeared from his base, to be found as described earlier.

With psychotherapy, he was able to verbalize his fears, his conflicts about flying, and his lifelong insecurity. It became evident that his future career as an aviator was at an end. After this forcible medical resolution of his conflicts over flying, he recovered rather rapidly and eventually was able to recall the events of the period of amnesia.

In this example the amnesia was a part of a typical fugue state in which the cadet wandered aimlessly, lost and disorganized. He utilized the suggestion he obtained from the newspaper to produce unconsciously a psychologic illness which eventually helped him to solve a previously insoluble conflict. This was done on an unconscious, involuntary level of awareness.

Somnambulism

Somnambulism is an example of dissociative activity which many of us have met. While an occasional instance of sleepwalking in itself may have no great significance, it is nevertheless to be regarded as indicative of emotional conflict and disturbance which may result in future difficulty. Most sleepwalking occurs in childhood. It is more significant pathologically when somnambulism persists into adult life. The following somewhat dramatic case illustrates the rare instance in which the sleepwalker places himself in jeopardy.

Case 9. A 22-year-old man was subject to repeated episodes of sleepwalking. One night while asleep he climbed from the window of his apartment building, 12 stories above ground, and walked on a narrow ledge to another window. He returned to bed without waking. A horrified roommate watched the performance and after his friend had returned to the room stated he had been afraid to move or comment for fear of awakening the patient, who might have become startled and fallen to the street below. When the sleepwalker was awakened he had no recollection of the incident. He refused to believe it as described until confronted with his sooty feet and in the morning by footprints he had left on the ledge.

Somnambulism is the scientific term applied to the dissociative reaction which results in gross physical activity while asleep. Somnambulism occurs with a fair amount of frequency in childhood and on occasions on into adolescence and later life. Its relative pathologic significance and its importance as an indicator of underlying emotional conflict in these years may vary greatly. It should be regarded as a symptom of underlying emotional disturbance rather than as a diagnostic entity.

Hypnosis

As a psychologic phenomenon hypnosis is an excellent example of dissociation. Under hypnosis the subject dissociates his conscious awareness from the wide area of surrounding reality into the narrow confines which the operator suggests. Thus, we may define hypnosis as "an altered state of awareness in which the subject pays attention to only that . . . which the hypnotist wishes."[3]

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* Contributed by M. deG. Ruffin, M.D., who also collaborated in preparing the corresponding chapter in "An Outline of Dynamic Psychiatry."

History. The history of hypnosis extends into antiquity. Trances and trance-like states are described in history, literature and folk lore. They have been associated with magic, mysticism, demons and evil spirits, theatrics and religion.[7] Although knowledge has existed also about suggestibility, and the ability of one individual to unduly control or influence others, it is only in recent times that medicine and science have attempted to explore and understand these phenomena.

Anton Mesmer recognized the power of suggestion in treatment, and from 1776 to his death in 1815 he employed it with notorious success, largely in Paris. Partly in an effort to meet critics, he devised a theory of "animal-magnetism" to explain his results. This did not hold up under scrutiny and was scientifically discredited by a commission which included Benjamin Franklin.

The use of hypnosis* (so named in 1841 by James Braid, an Englishman) has continued sporadically as more has been learned of its nature and dynamics. Prior to the discovery of anesthesia it was occasionally used quite successfully in surgery. In the later part of the nineteenth century an increasing number of reputable scientists made use of, or studied hypnosis. These included the famous neurologist Charcot of Paris and his associate, Bernheim of Nancy. Freud, who was for a time their student, later working with Breuer, early used hypnosis as a means to the recall of "forgotten" painful emotional experiences and memories. Freud[8] also used the interesting phenomenon of post-hypnotic suggestion to help prove the existence of the unconscious.

Although Freud, as have others since, abandoned hypnosis, the subject has served to intrigue people in widely diverse fields. Although it has failed to provide an easier or faster pathway to the dynamics in individual cases of emotional illness, and hence has not earned a place as a major therapeutic tool in medicine, by its very existence as a dramatic procedure, hypnosis continues to hold sporadically the interest of various physicians and scientists.

Dynamics. In hypnosis an intense relationship is established between two people as a result of which the subject dissociates from his conscious awareness the impingement of influences or perceptions except those which are directed by the hypnotist. To the subject in deep hypnosis nothing appears to exist except what the hypnotist wishes to exist for him. To be a "good" subject there must be voluntary complete surrender to the will of the hypnotist. This requires a great amount of trust, faith, confidence and submissiveness, as well as the basic capacity for dissociation to the extent required.

Different technics are favored in the induction of hypnosis.[9-12] Most of them have in common directing the focus of the subject's attention, usually visual, upon some small object, to the rapid and complete elimination of outside influences. This is accompanied by the concurrent suggestion of drowsiness or sleepiness. The skilled operator can often induce a hypnotic trance of some depth in the willing subject in a matter of minutes. With repeated hypnosis and implanted suggestions of easy hypnotizability, induction can be made progressively easier and in some instances be effected immediately as a prearranged response to a simple stimulus. Here the subsequent hypnosis is aided or induced by post-hypnotic suggestion.

Characteristic selectivity. An important aspect and a real limitation to the use of hypnosis is the selectivity both as to hypnotist and subject. The ability to be a good hypnotist involves more art than science or training, although these factors can of course contribute substantially. However, it is clear that a very limited number of persons are able to develop great skill in hypnosis.

Selectivity also applies to subjects. Even entertainers have learned empirically, if in no other way, that careful selection of subjects is a prerequisite to successful demonstrations.

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* Sometimes the term "mesmerism," after Anton Mesmer, is still heard, although it may carry a connotation of undue influence or questionable ethics.

Although authorities differ in estimates of hypnotizability of the public, in general only 10 to 20 per cent of the general public can be so classed. Of them only a small number are "good" subjects. In a recent survey of the literature on the subject of hypnosis, which included the preparation and review of a bibliography of nearly 700 items,[13] the repeated references to "good" or "excellent" subjects, particularly in conducting the more complex experiments, was indeed impressive.

Various tests are used to determine susceptibility, from the gross tests of suggestiveness used by the stage entertainers to research with complex psychologic testing such as the Rorschach. One method used in the theater is to ask the audience to raise their hands above their heads, clasp them together, and then suggest that there will be difficulty in unclasping them. People who have difficulty as a result of this simple suggestion are then chosen as subjects, and are usually good ones. The use of the Rorschach is a scientific refinement employed by a number of investigators.[14, 15] Favorable signs are those generally indicating free-floating anxiety and labile affectivity, although these are not absolute.

In addition to the requirements earlier noted of trust, faith, confidence, submission and ability to dissociate, suggestibility is important and so is youth. Thus the "best" experiments generally involve subjects in the young adult age group. There appears to be a direct correlation between youth and suggestibility, so that as age increases one's value as a potential subject very likely decreases.

These comments as to the selectivity of hypnosis are also important as indications of its limitations. Witnesses of a demonstration on hypnosis are occasionally seen to fall unwittingly into some degree of trance although not actually serving as subjects. While this may be observed as an indication of individual suggestibility, nevertheless hypnosis is not possible against the will of the subject.* Coöperation must be voluntary and complete.

The related use of truth serum. In the effort to overcome some of the limitations of hypnosis, adjunctive drugs have been used. The unfortunate misnomer, truth serum, has been applied, although the material is by no means a serum; neither does it guarantee the truth.[17] The most frequently used drugs have been sodium amytal, pentobarbital sodium, scopolamine hydrobromide, other barbiturates and less frequently nitrous oxide and some of the anesthetics. These drugs, together with alcohol, have historically decreased conscious control, lessened inhibition and censorship, and increased volubility.

As an aid to criminal interrogation, there are likely to be two factors of equal or greater importance than the drug itself. The first is the skill and experience of the interrogator. The second is the combination of underlying psychologic factors in the subject tending to produce a confession. These include such things as (1) the subconscious wish and need for punishment; (2) a desire to gain attention and notoriety—a perverse kind of "credit" (this often helps account for the multiple confessions sometimes reported following a particularly noteworthy crime); (3) the resulting release of tension, anxiety, and lessened need for constant, tiring, alert defense, caution and self-preservation, and (4) the easing of personal conscience—the desire to "square things" with the community.

Thus, a criminal may welcome narcosis as an excuse to follow already present but hidden (unconscious) psychologic forces which urge confession.[18, 19]

In general, the use of appropriate drugs as adjuncts to hypnosis may be summarized by stating that susceptibility to hypnosis may be increased, and drugs are occasionally used with refractory patients to secure initial trances with gradual lowering of dependence upon the drug to induce hypnosis. It may be surmised that the administration of the drug can, of itself, have important psychologic implications which might occasionally lead to some results even though an inert substance were substituted.

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* In contradiction, a Danish writer, Hofman-Bang,[16] alone states his opinion that few people can resist hypnosis by the experienced and clever operator.

Anti-social acts under hypnosis. Experiments have been devised, notably by Wells,[20] Erickson,[21] and others, purporting to prove the contention of many authorities that hypnotized subjects can not be induced to carry out acts which are injurious to themselves or are anti-social. However, later experiments by Brenman[22] in which she employs various refinements of approach and subtleties of suggestion raise substantial doubts at least. Where the production of acts contrary to normal conscience are attempted, a measure of success undoubtedly depends upon (1) concealment of the anti-social nature of the act by implanted suggestions, illusions, or false impressions, so that the subject is unaware of the full implications and the acts as performed become compatible with his ethical and moral standards, or (2) the presence of preëxisting, partly or entirely unconscious, drives toward carrying out the suggested act, plus (3) the establishment of a considerable bond of faith, trust and confidence in the hypnotist which discounts any possible inimical consequences to the subject.

In a brief review of this question, Weitzenhoffer summarized, "If the situation appears (or is made to appear by illusion or delusion, paramnesias or suggestion of the operator) socially, or in any other ways acceptable to the subject, he probably can be induced to commit anti-social acts. If he perceives a situation is contrary to his own ethical system, it is very unlikely that he can be made to carry out criminal acts."

In general, however, it must be borne in mind that this remains an area of controversy among experts. The suggestion of an act contrary to conscience or to usual moral or ethical standards ordinarily results in simple refusal by the hypnotic subject or in his waking from the trance.

Therapy. As a part of the average physician's therapeutic armamentarium, hypnosis has not proved popular. This has been in large part due to its limitations, selectivity, the inherent dangers in the hands of the less experienced, the somewhat unpredictable results, and its nonprofessional use adopted for entertainment or perhaps questionable purposes. Although many psychiatrists become interested or enthusiastic about hypnosis, usually at some point in their training* or early experience, this interest seldom continues. Although Freud[23, 24] early worked extensively with hypnosis, he abandoned it in favor of the free association of psychoanalysis as a more uniformly effective approach to the repressed material of the unconscious. Of the nearly 400 psychiatrists in the Washington Metropolitan Area[25] only one or two currently make much use of hypnosis in therapy.

Hypnosis has an appeal to some patients because of the passive role required of them. Investigative psychotherapy would be much less difficult and painful if the therapist took over the major responsibility for the work while the patient would be, in effect, anesthetized. Unfortunately, this cannot be. For psychotherapy to be effective, the patient must be a willing collaborator. In effect, he must assist with the painful "psychologic surgery" necessary, without benefit of the anesthesia available in actual surgery. Even in cases where the therapist can occasionally through hypnosis learn about the dynamics of the case, securing real acceptance and constructive use by the patient may prove no quicker or easier. Indeed this circumstance may become intolerably frustrating to the therapist.

Hypnosis is by no means without dangers.[16, 26, 27] These cannot be covered here. However, the amateur hypnotist invites possible serious psychologic sequelae in delving into mental mechanisms and processes beyond his understanding. Hypnosis is not a toy, and its use should clearly be restricted to the experienced and competent professional scientist working in legitimate areas of therapy or research. To the interested student there are many references available describing ways in which physicians have endeavored to use hypnosis in psychotherapy or as an adjunct to various psychotherapeutic approaches.

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* Dr. Robert T. Morse has pointed out an interesting correlation sometimes observed in the loss of interest in hypnosis taking place during the personal analysis of young psychiatrists in training (personal communication).

An implement of research. Hypnosis has perhaps its best legitimate scientific use as an implement of research. The degree of control possible with an excellent subject offers many avenues of exploration to the interested student. Indeed, a knowledge of these, together with an actual or implicit appreciation of the possible untoward results and misuse, could have implications as regards the relative infrequency with which hypnotists themselves report undergoing hypnosis.[13]

Several of the more clearly delineated avenues of research and investigation by means of hypnosis are as follows:

Post-hypnotic suggestions. These are suggestions given to a subject under hypnosis for him to later (post-hypnotically) perform some given act when a certain word is said or stimulus provided. Many interesting experiments have been devised. As noted previously, Freud early used this instance of obeying a "forgotten" instruction as proof for the existence of the unconscious.[5] Patten[28] found that suggested responses persisted post-hypnotically at least 1 month, while others[23] report even longer persistence.

Memory loss. This normally occurs to some extent for the hypnotic session but can be reënforced to the point of vigorous denial for the hypnotic experience ever happening, or, as in Brenman's experiments,[22] insistence that the particular person was among the poorer and rejected candidates for hypnosis. False memories, paramnesias, can be implanted and the recall of lost memories facilitated in many instances.

Dreams. These may be induced under hypnosis. Subjects can also sometimes more readily interpret the symbolism of their own dreams and the dreams of others while hypnotized.[30] This proves possible as a consequence of a decrease of the inhibitions present in full consciousness.

Time distortion. The normal appreciation of time can be greatly affected. By suggestion, time may appear to pass faster or more slowly.[31, 32] The day, month, or year may be changed, and anniversaries or earlier experiences may be recalled and in some instances relived.

Regression. By appropriate handling of the "best" subject in hypnosis, artificial temporary regression can be induced to carry the subject back to an earlier age level suggested for him by the operator. His behavior and responses will approximate the corresponding developmental level. The following data are the result of some recent interesting research with regression under hypnosis. Figures 1, 2 and 3 illustrate regression under hypnosis in the case of a man aged 24.[11]

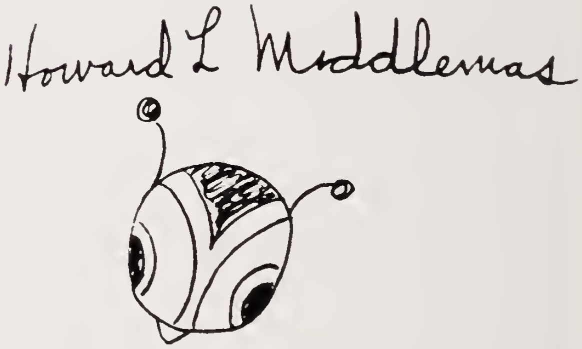

FIG. 1. The subject under deep hypnosis writes his name and draws his own principal cartoon character. Age is 24. Regression has not been suggested.

Conflicts, illusions and hallucinations. Conflicts may be produced as may feelings of guilt and anxiety. Illusions, false perceptions, and both hypnotic and post-hypnotic hallucinations of various kinds can be suggested. Even the experienced investigator had best explore these areas with great circumspection because of possible untoward psychologic consequences.

It may be noted in closing, however, that even with the most coöperative subject, there is a degree of residual unconscious control which serves a protective function. This helps to maintain certain limits of effectiveness and control and also helps to ensure in general the temporary nature of changes produced. Thus, it is not possible to produce major changes in orientation, attitudes or behavior. Basic personality structure ordinarily can not be altered by hypnotic suggestion.

SUMMARY

This paper covers briefly a large area which includes the various pathologic entities and psychologic phenomena in which the most prominent feature is dissociation. The use of dissociation as a useful process allowing several simultaneous streams of mental activity to take place was differentiated from several types of pathologic dissociation seen in the attempted flight from an intolerable emotional conflict. Alternating and side-by-side types of dissociation were identified.

HOWARD L MIDDLEMAS

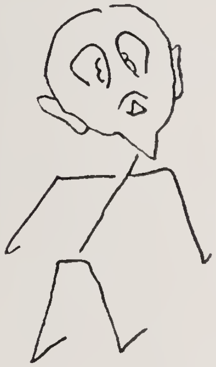

FIG. 2 (left): By suggestion, the subject has regressed to age 12. Note that the name is printed, the drawing uncertain and much less detailed.

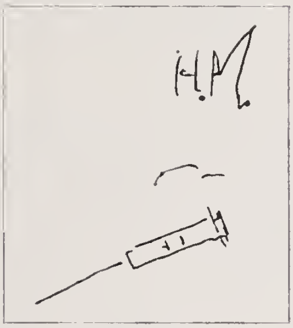

FIG. 3 (in box): Regression to age 7. Having suffered a serious illness with nearly a year's hospitalization, he had missed starting school and can only crudely print his initials. He draws a hypodermic syringe and needle with visible emotional stress in view of its association with many painful experiences in the hospital.

Following brief mention of the rare syndrome of the double or alternating personality, the normal and pathologic manifestations of depersonalization were outlined. Amnesia was discussed with reference to diagnosis, incidence, pathogenesis, and the clinical features. The protective function of amnesia was illustrated, as was its frequent relation to trauma and electroshock. The typical fugue state was differentiated and illustrated, as was the more common manifestation of dissociation seen in somnambulism.

Finally, an outline of data about hypnosis has been presented with briefly summarized information about its history, dynamics, characteristic selectivity, the related use of truth serum, and the place of hypnosis in therapy and research.

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President's Page

TRAFFIC RESPONSIBILITY

Persons having varying degrees of physical or mental incapacity have at times, as a result of these defects, caused the death of themselves or of others in traffic accidents in the District of Columbia. Physicians are regularly called upon to certify whether the condition of a patient makes it unwise to award him a license to drive an automobile. In exercising this function they have a serious responsibility toward the safety of persons unknown to them who are the potential victims of such accidents.

This responsibility is brought closer home when the physician realizes that the patient certified for a driver's license may conceivably operate an automobile on a street where members of his own family may be passing by. The Committee on Traffic of the Medical Society is operating in close association with the Director of Vehicles and Traffic to devise better means of screening from the medical standpoint those who apply for driver's permits. The Society has a responsibility in the prevention of accidents as well as in the treatment of victims of accidents.

Herbert P. Ramsey

Editorials

OUR FAIR RED FEATHER SHARE

As crisp autumn days bring colorful hues to the foliage in Rock Creek Park and other public spaces we are all reminded that the annual Red Feather-USO Campaign opens on October 12. It is our greatest adventure in "organized neighborliness," known officially as the 1954 Community Chest Federation-United Defense Fund (USO) Campaign, to provide adequate resources for 100 Red Feather agencies and the several hospitalization funds operating in the entire National Capital Area.

I commend the campaign to the Medical Society of the District of Columbia in 6 words—People Helping People To Help Themselves. This spirit of dedication to mutual helpfulness has always been in the hearts of all physicians. Many of our members are giving generously through the Red Feather Campaign and of their time and skills all through the year. The people of the Washington area are grateful for these ministrations, typical, however, of thousands of our fellow-citizens who give and work in the Community Chest enterprise.

General Chairman Aaron Goldman is the author of our 1954 Campaign slogan, "GIVE GLADLY—GIVE YOUR FAIR SHARE," which greets us from posters on the lamp posts along the main thoroughfares. And each poster, by the way, shows Norman Rockwell's concept of a happy family, Mother and Dad with son and daughter, who, the artist says, may be givers this year because they were recipients of Red Feather services sometime last year. So there are two overtones in the Campaign this autumn, GIVE GLADLY and GIVE YOUR FAIR SHARE. Each complements or strengthens the other. "It's a great idea if they all do it" was the comment of one person on the Community Chest when this new venture came to Washington 25 years ago (incorporated on September 13, 1928, it sponsored the first city-wide campaign in January 1929).

Now I hope very much all of the physicians will have a part in the 26th Campaign this year. We are informed that only 53 per cent of our profession made contributions last year. If they will continue their support and the other 47 per cent will join them, then we, as one professional group, will have done our fair share. Remember, the dentists and the lawyers are also organized for self-solicitation, and their published reports will be compared with ours.

"But what is one's fair share?" someone may ask. This question can best be answered, of course, by the individual contributor in the light of his own conscience. Each campaign worker, however, will have available a small folder showing a schedule of what the most generous are giving in Washington and other metropolitan cities of comparable size. A pledge with convenient installment payments will make fair share participation easier.

There's the story—or its highlights—very briefly stated. If you want additional information or have questions, just call me at National 8-0518.

One final suggestion—please take time to give real personal consideration to the Community Chest—USO appeal this year. Read the leaflet your fellow-physician will place on your desk, look at the pictures, and just have a heart-to-heart quiet moment with yourself before you decide on your FAIR SHARE. What you and I and 400,000 plus other people do will determine, in a very real sense, the kind of community we help to create all through next year.

J. Ross Veal, M.D.

Chairman, Physicians Group,
1954 Red Feather Campaign

WHAT HAVE YOU LEARNED RECENTLY?

If you've learned nothing, you're way behind, because medicine has been going on without you. The ever-changing antibiotic picture, the other wonder drugs, increased knowledge of cellular physiology, new diseases and symptom-complexes, new operative procedures, and a host of other things have left you "way back."

If you read 3 hours every night, attend local society meetings regularly, and go to postgraduate courses at least twice a year, keeping up with medicine is still difficult.

Some years ago, through the initiative of forward-looking ophthalmologists and otolaryngologists, the American Academy of Ophthalmology and Otolaryngology set up a teaching program which is unequaled in any other country or by any other group of practitioners. This effort is chiefly in two directions, the Home Study Courses and the general instruction section of the annual Academy meeting.

Many national and specialty qualifying boards have set up study programs for their candidates, with varying degrees of success. The Home Study Program of the American Board of Ophthalmology provides a detailed curriculum, texts, reference material, probing questionnaires, and finally, question-and-answer periods at the time of the annual Academy meeting. The subjects studied and discussed are those considered basic for the resident in ophthalmology and for other Board candidates. The subjects of refraction, external diseases, bacteriology, pathology, ophthalmoscopy, medical ophthalmology, perimetry, neuro-ophthalmology, and extraocular muscles all receive detailed attention. This is excellent instruction for the embryo ophthalmologist in conjunction with 2 to 4 years of residency.

More unique, and on a much greater scale, is the annual instruction program for the Academy members (already Board-certified) and their guests. Each year at the annual Academy meeting there are 12 instruction hours in ophthalmology and 9 instruction hours in otolaryngology available to every registrant. These are purchased in advance or at the registration desk at the rate of 2 dollars per instruction hour per registrant (all of which goes to the treasury of the Academy).

These courses are conducted by outstanding teachers and practitioners of ophthalmology and otolaryngology of the Americas and are almost completely sold out each year. Thus, the average eye or ear, nose and throat specialist has available this October in Chicago 394 man-hours of instruction in ophthalmology, which includes 49 continuous courses (varying in length from 2 to 12 hours) and 187 courses of 1 hour each. Similarly, 273 hours of otolaryngological instruction includes 36 continuous courses of 2 to 4 hours and 217 courses of 1 hour length.

Not only is the volume of such instruction impressive, but the subject matter runs the gamut of medical interest—clinical and research, proven and theoretical, broad fundamentals and narrow "pets." Such titles as "ocular malingering," "psychosomatic medicine," "neuralgias of the head," "contact lens," "visual physiology," "eye diseases common to children," "retinopathies," "interesting neuro-ophthalmological problems," "cataract surgery" and numerous courses in "strabismus" demonstrate, in part, the wide variety of material available.

This writing is not solely for the purpose of praising the founders of the graduate teaching program in ophthalmology and otolaryngology but to suggest that every specialty can and probably should do a similar thing (if they haven't already done so) and that individual learning should continue as long as the individual continues in practice.

Don't die on the vine!

F. D. C

THE HOSPITAL MEDICAL LIBRARY

> "We have no better means of judging the intelligence of a profession than by its general collection of books . . . a library gradually and insensibly moulds the profession to a better and a higher status."
>
> —*Sir William Osler*

The atom age is one of continual progress, and medicine advances with the times. American medicine has attained its present high status because its physicians have built on the firm foundations of the past and have adapted the best standards of that past to the ever-changing needs of the present. Medical libraries have been a primary factor in this growth, particularly the medical library within a hospital's walls. The distinguishing characteristic of such a library is its immediate response to the needs of its clientele.

Today the medical library in a modern hospital is not only a requirement in minimum standards for hospitals, but it is a desirable and tangible asset. It is doubtful, however, if the spirit as well as the word of the Council on Medical Education is observed universally. By constant advertisement of the merits of this therapeutic and educational tool the desired end may be accomplished.

A medical library is not merely a depository for books, arranged in an orderly manner, under lock and key where they may collect dust and acquire the yellow discoloration of antiquity; it is a living organism which provides knowledge and sustenance to those who utilize its collection. Size is no index to the value of its books, nor does it reflect the value of the service given to its patrons. A small medical library that is well organized and staffed by a trained medical librarian is one of the greatest factors in medical progress. It assists and furthers the education, reading and research of the professional staff, who in turn constantly raise the medical standards of the institution.

One of the first essentials for consideration in the establishment of a medical library is its physical facilities. It should occupy a space in the hospital that is quiet, easily accessible to the staff, and that has room for expansion. The library should be attractively furnished with spacious reading tables and comfortable chairs and should be adequately lighted at all times. Ventilation is most important; air-conditioning today is not a luxury but a necessity. A room that is properly humidified and ventilated is not only conducive to reading and study but it is also a life preserver for the books. Research has shown that an atmosphere that is too dry makes pages too brittle and dries the glue in bindings, and one that is too humid promotes mold. The books should be classified and arranged on the shelves together with the bound journals so that titles are easily read and volumes can be obtained with little effort. The entire atmosphere of the library should encourage study and research and invite brief, leisurely browsing.

The library should contain a carefully selected list of the latest and best in medical texts, reference books, monographs, and allied scientific literature; it should also include a wide selection of medical periodicals, where new developments are presented first. Material should be representative of all types of service in the hospital and should be in keeping with the educational program of the institution.

A full-time trained medical librarian is essential for the well organized medical library. She should be what the name implies, not merely a clerk without special training. At the present time it is possible to obtain a librarian who is certified by the Medical Library Association, the official national organization. New certification standards of this group require applicants to have a college degree, a year's library training in an acceptable school of librarianship, including a course in medical library work, or evidence of knowledge and experience in the field of medical librarianship.

DIABETES DETECTION DRIVE

The annual Diabetes Detection Drive of the American Diabetes Association is scheduled for November 15 to 21. The Drive this year will be more closely correlated with the individual doctor-patient relationship than heretofore. The local chapter of the A.D.A. hopes that the physicians of Washington will participate and coöperate in this Drive.

Lawrence J. Thomas, M.D.
President, Diabetes Association of D. C.

A competent librarian today does far more than supply books to those who request them; her duties radiate into many avenues. Her services are highly professional yet there is a very personal relationship between the librarian and the medical staff she serves. She arranges for the necessary cataloging and indexing of all books, bound and current journals, as well as ephemeral material, and she performs many administrative duties subject to the approval of the Administrator and the Library Committee. It is part of her work to keep informed of recent publications and to make recommendations for the purchase of new books, discarding of obsolete editions, and the binding of selective journals. She also compiles statistics, prepares monthly and annual reports concerning the activities of the library, and meets with the Library Committee to discuss all pertinent matters. She also represents the hospital library at meetings of library organizations and attends meetings in allied fields.

The librarian works closely with the busy physician in his medical research, and daily assists the interns and residents in obtaining material that will further their education. She prepares bibliographies upon any medical subject, abstracts, obtains references for research, edits medical papers, files reprints, and arranges for inter-library loans. She is also "information, please" to the many requests for information which come via telephone daily from both the medical profession and the laity. Such requests are often amazing in volume and nature and it requires both discretion and patience to satisfy (if possible) the inquisitive persons.

It is necessary for the librarian to have a wide knowledge of medicine and its allied branches and to constantly keep pace with advances in medicine. Her medical education is like the physician's—it must continue *ad infinitum*! The hospital can enhance the value of the librarian by offering her access to surgery, postmortem examinations, clinical and pathological conferences, and all staff meetings. Such education and experience will pay dividends as each doctor will profit by the education she receives from such opportunities.

In the District of Columbia the hospital medical library has the unique advantage of being near the best medical libraries in the country—the U. S. Armed Forces Medical Library and the Library of Congress. Other excellent medical libraries are also available—the National Institutes of Health, governmental libraries and several medical school libraries. The resources of these libraries may be readily used if the necessary affiliation is established for service and inter-library loan.

The library is one department that is not expendable. Considering the high cost of operating a hospital today, there is nothing that gives more return, dollar for dollar spent, than the money invested in the medical library. No other use of funds will so vastly improve the standards of the institution.

The final evaluation of any library is in its use; its success depends upon the whole support of both the staff and the administration. Members of the medical profession will find much in common within its quiet walls. It is the common meeting ground of all specialties. The progressive physician understands that contact with his medical library is an essential to good medical practice.

C. S. W.

THE PHYSICIAN AND THE SCHOOL CHILD

This year the school bell rings for a record-breaking thirty million American children. I wonder how many of these 30,000,000 children will receive a complete physical examination such as you and I have been giving these past few weeks. Perhaps not so many as there should be. But even if the number included all of them, as it should, would this be enough? The stress and strain, the type of world in which these children live, and, just as important, in which their parents live, make me feel that the answer in all honesty would have to be in the negative. For it is too apparent we are overlooking a very important phase in their make-up, their psychological well-being. Truly a healthy nation is a strong nation, and health in the individual is basic to happiness. But as Dr. Terman discovered in his now famous study of a thousand intellectually gifted children, physical health examinations cannot be oversold, but quite often too much is expected from children only because they are found to be physically fit.

Little attention is given by physicians to the psychological aspect of healthy youngsters. The time has come when we doctors must spend more time in ferreting out the background of the school-age child, the ones that do "poorly" in their school work. Although Mary has her glasses and can now see the blackboard, still she makes very little progress. Or, Johnny has had iron and vitamins, his blood count is now normal, yet he fails to progress in school. He is listless and inattentive. Then the cycle begins again; the teachers hunt for the reasons, find none, and send the student home with a note, or call to discuss the problem with the parents. The parents question the child, and not being able to determine the difficulty, more than likely take the child to the family physician. Our examination is fruitless, because more than often nothing further than the physical health of the child is considered. This is the time to examine the child a bit further, more by words than by the tactile method. Through questioning, sources of happiness or unhappiness, home problems, social maladjustments, or just plain emotional disturbances may be revealed.

Unfortunately, public education in the need for the prevention and/or treatment of ills of this nature has not been propagandized to the extent that the routine preschool physical examination has; therefore, when the psychological aspect of the child's illness is broached to the parents, many parents become quite chagrined.

Like cancer, emotional and social maladjustments can usually be removed or arrested if detected early.

True, we who are general physicians are neither psychiatrists nor psychologists; but it is our responsibility and duty to direct children into the proper channels and to the proper agencies where they may receive necessary attention.

We have, then, a personal responsibility to be thoroughly familiar with the services offered by our community in child guidance and psychotherapy so that our recommendations to parents will be sound and fruitful. As physicians, our responsibility extends even further than this. We should place our experience and knowledge, in so far as is possible, at the disposal of worthy civic groups interested in child welfare.

In the final analysis, it is quite probable that we have a greater opportunity to detect adjustment problems and delinquency in the making than has any other group. When we do see these children, and have finally ruled out physical disease and disability, we are usually the first to stand face to face with an early beginning case of emotional or social maladjustment.

In the course of a busy practice we shall see a number of these cases, and no matter what our training—or lack of training—in psychology or psychiatry, we are at least exposed to such children and come away each time armed with a little more knowledge—knowledge that should be of tremendous value in our community's effort to salvage its youth.

I. Phillips Frohman, M.D.

In and Out of Focus

BY THE OBSERVER

Something New in Programs

Many members will recall that during World War II weekly scientific meetings were abandoned in favor of bi-weekly meetings. It was planned to resume Wednesday night programs when hostilities had ceased and the considerable number of physicians in the armed forces had returned to their practices. However, an attempt to revive them was unsuccessful.

Following a period of experimentation with meetings at various intervals, it was finally decided to limit the number of scientific programs to the Annual Scientific Assembly and the Midwinter Seminar. The only other meetings scheduled during the year were two or three business meetings.

When Dr. Herbert P. Ramsey became President of the Society, he expressed regret that the reduction in number of meetings had resulted in the Medical Society's building no longer being the center of medical activity in Washington. Formerly, he said, it had been a common gathering place for members, but now fewer and fewer members thought of going there. True, there were still frequent meetings of sections and special societies in the building, but there was a void left when general meetings were discontinued. This void he would like to see filled.

He proposed that monthly meetings of the Society be scheduled and a determined effort made to attract members to their professional home. To make certain of the success of the new venture, he proposed the appointment of an imaginative and able chairman. The Executive Board was impressed and gave its approval to the project. Dr. Ramsey thereupon appointed Dr. Hugh H. Hussey as chairman of the reconstituted Program Committee. Dr. Hussey had already demonstrated his capabilities in a similar capacity as originator and planner of the Conference on Medical Teaching Technics held in April 1952. The Conference had not only attracted Nationwide attention but was one of the most successful educational ventures undertaken by the Society.

Dr. Hussey wisely surrounded himself with workers who were not only receptive to original ideas but were themselves talented program planners. The Committee members appointed were: Drs. Thomas M. Peery, Ernest H. Aschenbach, Nicholas J. Cotsonas, Jr., Francis M. Forster, Henry A. Grennan, Zigmond M. Lebensohn, James P. Lyons, and Ralph D. Whitley.

At the Committee's first meeting, Dr. Hussey expressed the view that scientific programs now being presented by various medical organizations and institutions met the requirements or at least the demands of Washington physicians. He agreed with Dr. Ramsey it was regrettable that there had been a lessening of interest in Society affairs since general meetings of the organization in its building had been suspended. He proposed that future programs be planned for both physicians and their wives. He suggested several challenging topics and proposed unique methods of presentation. The Committee responded enthusiastically.

The first meeting of the Society planned by the Committee is scheduled to be held in the new auditorium of the Clinical Center of the National Institutes of Health on September 23. Physicians and their wives have been invited to attend. The remaining meetings will be presented in the auditorium of the Medical Society's building. Pertinent information about the coming meetings follows:

November 4, 8:00 p.m.: Symposium on "Patients Are People," sponsored by the Society's Committee on Public Information and patterned after the meeting that packed the Medical Society's auditorium with physicians' secretaries last spring

December 16, 8:00 p.m.: Walter C. Alvarez, M.D., Internist, Editor, Author, speaking on "Great Light on the Common Neuroses"

January 6, 8:00 p.m.: Symposium on "Emotional Problems of Adolescents"

February 16, 17, and 18: ANNUAL MIDWINTER SEMINAR

March 3, 8:00 p.m.: Business meeting, plus "Stump the Medical Experts"—an opportunity to match wits with a panel of experts on things medical.

Here then is something new in programs. It is safe to prophesy that they will be very successful. An indication of this is the response to the invitations to the September 23 meeting at the Clinical Center in Bethesda. At the time this was written, over 600 physicians and their wives had notified the Society's office that they would be present. An auspicious beginning indeed!

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"But Is This Enough?"

When President Eisenhower is in top form, no one is his peer in creating an atmosphere of good will. He demonstrated this when he appeared before a special session of the House of Delegates of the American Medical Association, held in Washington last March. This undoubtedly accounted for the fact that many present were not too conscious of the import of what the President said. He, of course, complimented the Association and the physicians who make up its membership; but he also said, "We thoroughly understand . . . the importance of your functions in our society. We also understand and are determined to meet the requirements of our population in the services that only you can provide." What the President was trying to impart was, in your Observer's opinion, that his first obligation was to the people and he hoped that the medical profession would always go along with the Administration's health policies.

In the light of this statement, the views expressed by Mrs. Oveta Culp Hobby, Secretary of Health, Education and Welfare, in an address delivered before the American Hospital Association in San Francisco on August 31, takes on special significance.

"Speaking as a layman," she said, "I believe that an overwhelming majority of the American people have no desire whatsoever for socialized medicine in any form."

"The Federal Government would—I know—be going against the wishes of the American people were it to enter this field. President Eisenhower has said, '. . . we are opposed to Federal compulsory health insurance with its crushing cost, wasteful inefficiency, bureaucratic dead weight, and debased standards of medical care. We shall support those health activities by Government which stimulate the development of adequate hospital service without Federal interference in local administration. We favor support of scientific research. We pledge our continuous encouragement of improved methods of assuring health protection.'

"Thus the final answer must come, as it has always come, through the ingenuity and knowledge, the efficiency and industry, of the American people; through the voluntary application of our free enterprise principles to a major national problem."

Having reiterated the Administration's opposition to "socialized medicine," Mrs. Hobby was "completely candid" on the costs of medical care:

"The professional services are so geared and so priced," she observed, "that the well-to-do American and the indigent American can be cared for. They are so geared and so priced that the middle-income American—if still under 65—can pay the bills for an appendectomy, obstetrics, tonsillectomy, or any other average medical problem.

"But we have not yet found a way to save any average American family from destruction by the catastrophic illness. And we have not found a sure way to see our retired senior citizens through the increased illnesses of age.

"Some private foundations have helped. The National Foundation for Infantile Paralysis, for instance, has been the salvation of thousands of families which have suffered a severe case of poliomyelitis.

"But tuberculosis, strokes, congenital defects, cancer, arthritis, and many other diseases by their very duration can still wreck many a family's economy.

"The prepayment plan launched at Baylor University Hospital in Dallas has provided a start on one answer—a wonderful and inspiring start. Hospital leadership promoted and led in the development of that plan into the Blue Cross which today has almost 45,000,000 members.

"Millions of families now have a measure of assurance that they will receive hospital care when they need it, and hospitals have gained a financial stability that they never had before.

"But is this enough?

"I think we will all agree that it is not.

"More is needed, and we must find the way to achieve that more within our private enterprise system."

In the main, no informed person will question the validity of these statements. However, Mrs. Hobby's comments on professional services were, to say the least, superficial. Obviously these services deserved more adequate treatment or they should not have been mentioned at all.

Medical leaders have been fully cognizant of financial difficulties encountered by patients and their families when confronted by catastrophic illness. They have been aware, too, that the benefits provided by most medical prepayment plans must be materially broadened to meet the needs of the people. They have been and are wrestling with this and other problems involved in the conduct of these plans. As an official of a Blue Shield Plan, your Observer can testify how knotty and complex they are. Sometimes they seen unsolvable, but with patience and untiring effort a solution is usually found.

Despite all obstacles, great progress has been made. The following figures speak eloquently for the medical prepayment movement. On March 31, 1946, the Blue Shield organization consisted of nine plans with an enrollment of 1,336,645 members (subscribers). Some seven years later, June 30, 1953, there were 26,632,513 enrolled. Washington's own Blue Shield Plan began enrolling members in 1948. Today it has an enrollment of over 400,000.

No reference whatsoever was made by Mrs. Hobby to the Blue Shield and other medically-sponsored prepayment plans. Blue Cross, to which she did refer, does not provide surgical or medical services. In your Observer's opinion, this was a regrettable omission.

It is hoped that the Secretary of Health, Education and Welfare will, when the opportunity offers, give proper recognition to accomplishments in the medical prepayment field. It would do much to buoy the spirits of hundreds of volunteer workers and harassed administrators. More important, it would be convincing proof to the 122,000 physician-participants in Blue Shield Plans that their efforts to make prepaid medicine work are not unappreciated by an Administration committed to "the voluntary way."

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Economic Realities Hospitalization insurance is no bonanza for private insurance companies. Emerson Davis, Manager of the Inter-Ocean Insurance Company, made this clear in addressing the Texas Hospital Association at Galveston last May.

Despite substantial increase in premium rates, the latest figures show that in recent years the net loss to private companies on group hospitalization insurance has averaged as much as 5 per cent. Mr. Davis hastens to point out, however, that hospitalization insurance provides only 20 per cent of the premium income of insurance companies "specializing in human life values—that is, the loss of income from death, old age, sickness or disability." Nevertheless, it takes on considerable importance "because it is in the forefront of the attack on insurance by the socialists and professional do-gooders."

Among the factors which Mr. Davis says contribute to financial losses sustained by companies writing hospitalization insurance are:

Multiple Coverage. The opinion held by many, that it makes little difference how much insurance a man has so long as he pays the premium on all policies, has had serious consequences. "You recognize the fact that if a man owns a $10,000 residence, it would be bad public policy for him to carry $30,000 worth of fire insurance. It might tend to increase the fire hazard. Similarly, if a man owns three or four hospitalization policies and is permitted to realize a substantial profit on a hospitalization, we have found from bitter experience it not only increases the incidence of hospitalization, particularly among the dependents who are not gainfully employed, but it extends the duration of the hospitalization. This sort of thing increases our cost, which means it increases the cost to the insured, and we are already approaching the limit of the average man's capacity to pay for private hospitalization insurance."

> *Increased Use of Hospital Facilities.* "Our greatest problem from an underwriting standpoint is the increasing incidence of hospitalization. That cannot go on indefinitely—or even very much further, without destroying the principle of private insurance. It was never contemplated in computing insurance rates that policyholders would be hospitalized for the convenience of the medical profession or for the monetary profit of the insured. We realize we have contributed to putting the doctor on the spot in that by requiring no co-insurance feature his patient often insists on going to the hospital when the doctor himself would not elect it. It was only contemplated that under hospital insurance the policyholder would be indemnified for necessary hospitalization occasioned by serious disability."

Ten years ago the incidence of hospitalization was one in ten disabilities. At present it is one in eight. A decade ago policyholders were indemnified under an average insurance policy for one half of what they paid for hospitalization. At present the expenditures for hospitalization have doubled.

> *Excessive Hospital Charges.* "As long as some [hospitals] provide certain services below cost and attempt to make up that loss by excessive charges on other services, we are working at cross purposes. It would not be so bad if all of you picked the same items for excessive charges—we would know where we stood and could be governed accordingly. But as long as some hospitals charge 50 cents for 100,000 units of penicillin and others charge $4 for the same medication, we are in a quandary. This item is just an example. Some of you make up your losses on X-ray charges; some of you on laboratory; others of you on other items. I don't mean that those charges need to be uniform—because expenses vary in different localities, so far as overhead is concerned at least. But they don't vary 800 per cent."

Physicians' Failure to Coöperate. The adherence to the "old, established principle of charging in accordance with capacity to pay" and "to take into consideration the amount of insurance in establishing their fee" is wrong. The only reason an individual carries insurance is to be relieved of most of the expense of his illness. If he feels that he is paying what he normally would, plus his insurance, then insurance coverage holds no interest for him. If he cannot buy an insurance coverage from a private company to his own advantage, then he will turn to the government for his insurance and "we are right back again confronted with the hydra-headed dragon we must defeat and can only defeat by working together."

Policyholders' Attitude. Doctors and hospitals are too often not familiar with the difference between group and individual insurance. Group insurance is defined as a type of insurance "where large numbers of people are insured under one policy at a flat rate and where a high percentage of participation of employes is required." In such instances, the insurance company usually waives preëxisting conditions and places its reliance on the law of averages.

That condition is nonexistent for individual or family group policies. Here it is important it be ascertained that the prospective policyholder is in good physical condition. Here is where difficulties are encountered.

> "All of us in the business have even had people apply for hospitalization insurance, frankly stating they have to have an operation and want coverage. I don't know what it is that makes people think an insurance company represents a gravy train with an inexhaustible source of funds. They never realize that claim funds of insurance companies are derived from premiums paid by policyholders just as many people do not realize that government hand-outs are derived from taxes. An otherwise intelligent person who would never think of approaching a fire insurance agent with the proposition that his house is on fire and he would like to have fire insurance has no hesitancy in approaching a hospitalization insurance company with the proposition his wife has to have a hysterectomy or his kids need to have their tonsils removed and he would like to have some hospitalization insurance."

Hospitals are prone to place emphasis on the public's demand for service without considering the cost. "We have to reconcile that ideal to the realities of economic life. Except under the compulsion of taxes, direct and indirect, relatively few people would be willing to pay for all of the services available. If you educate your patients and clients to expect all of the services available whether or not they are necessary or even advisable, they will demand them, and only the government can collect adequate premiums, in the form of one tax or another, to pay for them. If it were possible to collect the premium we could provide the services cheaper, and with less red tape than the government can."

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The Missing Link

"Medical educators and thoughtful practicing physicians are constantly expressing concern about the future of medicine. Much of this concern centers on the future of general practice."

These are the introductory lines of an article, "The Need for a New Educational Approach," appearing in the September, 1953, issue of the *Journal of Medical Education*. Dr. Joseph S. Collings, author of the article, has just completed a six-year study of general practice and related problems in the United States and other countries, under the auspices of the Rockefeller Foundation, the National Institutes of Health, and the Health Insurance Plan of Greater New York, of which Dr. Collings was an associate medical director.

The concern now being shown for the general practitioners and their problems, Dr. Collings writes, is nothing new. "A review of the literature of the last fifty years shows that the same worries were current in nineteen hundred as at present and that the same thoughts were being expressed in almost the same words."

In essence these writers said:

"1. General practice (undefined, but considered either in their own image, or in the image of the pattern of general practice known to them locally) is doomed.

"2. The primary cause of the impending disaster is the ever-increasing trend toward specialization.

"3. The medical schools have gone along with this trend, adapted curricula and teaching methods to the needs of specialists and neglected the requirements of general practitioners.

"4. All this is bad; general practitioners are the 'backbone,' the 'life-blood,' the 'foundation,' etc. of the medical profession; people need general practitioners; the general practitioner (and therefore the public) is not getting the best treatment at the hands of the specialists, the hospitals and the medical schools."

Dr. Collings agrees that "most of this is sound enough, indeed some of it is indisputable but, having said it, the authors have had little that is practical to say about what might be done to stave off this (always impending) crisis."

The trend toward specialization, he observes, has been accelerated in the last twenty to twenty-five years. In the last decade medical educators have been more realistic in their approach to the problems which have arisen. However, programs devised by medical schools and hospitals to bring about a renaissance of general practice are still inadequate.

"The average graduate from an approved medical school, who has had an approved hospital training," Dr. Collings continues, "is versed in the basic clinical disciplines (and many not so basic) essential to the conduct of sound and safe general practice." The difficulty lies in the fact that when he enters general practice he fails to apply what he has learned. He soon discards such essentials as the taking of adequate histories and the keeping of accurate records. Physical examinations are superficial, mechanical aids for diagnosis being relied upon rather than the "time-consuming disciplines of hospital and medical school days." Admitted to a hospital, he may "undertake prodigious feats of surgery and obstetrics, gynecology and urology, which he had been so well instructed were the province of the surgical specialists."

But the chief enemy of the general practitioner, according to Dr. Collings, is time to do the things he knows he should do. Other obstacles are the environment in which he works and personal needs. As to the latter, he ventures this opinion:

"It must be recognized that the primary forces controlling general practice (and therefore the majority of medical care for the majority of the population) are social and economic."

Dr. Collings believes that medical schools can play a very important role in improving the lot of the general practitioner by creating "working examples of really good community practice, which can operate and survive the various conditions under which doctors are going to have to work. These must not be artificial and need to be financially self-supporting (except for the additional costs involved in teaching procedures). For this purpose the schools are going to have to call on the services of established practitioners not only in their immediate vicinity but in other regions representative of different community conditions. They will have to rely on these doctors, whether or not in the beginning they meet the exalted standards of teaching hospitals.

"The medical schools must take on the responsibility of recruiting these physicians and establishing them in working conditions which will permit a truly satisfactory level of community practice. This presupposes small group practice units with general practitioners as the key members of the group. It also presupposes the initial underwriting of the costs of small medical centers, basic equipment, and essential clerical and technical staffing. (This underwriting could take the form of long-term, no-interest loans.)"

"The development of this teaching medium is not going to be a sudden creation." It should, Dr. Collings urges, be considered as a three-stage operation:

"1. Creation of a satisfactory medical care unit, which can meet community needs, attain the standards of modern medical practice and survive within a given economic situation.

"2. Development of this into a teaching unit for undergraduate students.

"3. Further development into a unit of clinical and social medical research.

"Any attempt to do these three things simultaneously would be disastrous. The desire to do so, which would not be out of line with the academic-research approach, would require large financial subsidy and immediately render the entire program artificial."

Dr. Collings concludes: "There is creative work to be done in the field of teaching and developing general practice—it will never be done as long as medical schools 'ride on the coat-tails' of public health authorities and indigent care programs, or maintain a 'holier than thou attitude' to community practice and try to ignore or bypass this by further isolationism and confining serious teaching to the hospital."

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War Losses in Korea

There is some comfort in the figures appearing in the June, 1953, issue of the *Statistical Bulletin of the Metropolitan Life Insurance Company* which show that the loss in American lives in the Korean War compares favorably with corresponding figures in World War II. At best, statistics are cold, but in this instance they do point up one fact which lightens an otherwise drab picture, the fine record of the medical corps of the armed forces in Korea.

As is well known, our battle losses there have been heavy. According to the *Bulletin* there were more than 24,000 battle deaths. About 9,000 men are still missing in action. Assuming that nine tenths of these men are dead, the battle losses in Korea rise to about 32,000.

"This total," the *Bulletin* states, "is somewhat more than one tenth the corresponding figure for World War II (December 7, 1941, to August 1945) and compares with well over 50,000 battle deaths suffered by the Army land forces alone in the Pacific area during that conflict."

The heaviest losses of our forces in Korea were suffered early in the conflict. However, figures appearing in the *Bulletin* show that in 1950 the death rate was reduced from 7.9 per thousand, exclusive of those reported missing and later on presumed to be dead, to 3.2 in 1951, 1.3 in 1952, and 1.1 to June of the present year.

These rates, the *Bulletin* explains, are based on the total armed forces of the United States, including those stationed in this country as well as those abroad. If only the battle deaths overseas are taken into account, the rates for 1951 and 1952 increase to 10.9 and 3.9, respectively. In World War II, the overseas battle death rate for our Army varied from 12.1 in 1943 to 33.5 in 1944. The average for the period 1942 to 1945 was 22.5 a year.

As was the case in World War II, the greatest losses were suffered by the Marine Corps. Losses of the Corps for the years 1950 to 1953 were 7.1 per thousand, as compared with the 6.3 of the Army, 0.5 for the Air Force, and 0.2 for the Navy. The battle death rate for the Corps in the years 1941 to 1945 was much higher, 14.3 per thousand as compared to 9.4 for the Army and 4.2 for the Navy. More than 15 per cent of the battle deaths among the land forces were chargeable to the Air Corps in World War II. In Korea the proportion was less than 5 per cent.

It was when the investigation turned to the nonbattle deaths that the situation brightened. For the average death rate in the Navy and Marine Corps for the years 1950 to 1952 was virtually the same as in the peacetime years 1946 to 1949. "In fact," the *Bulletin* reports, "the death rate from disease was actually lower for the war period than in the prewar years but this improvement was counterbalanced by an increase in nonbattle injuries. From 1950 to 1952 the Navy and Marine Corps had an average annual death rate of 1.6 per thousand from nonbattle injuries and 0.3 from disease. In the four years, 1942 to 1945, the comparable rates were 2.0 and 0.5, respectively."

It is at this point that the *Bulletin* pays tribute to the medical personnel in the military services:

> "The very low death rate from disease among our armed forces in Korea indicates how very effective our military medical services have been, despite the handicap of singularly difficult conditions. Poor, often primitive, environmental sanitation; the high prevalence of infectious diseases; and extremes of temperature created many serious health problems which have been satisfactorily met. Losses resulting from exposure to cold have been reduced by instructing officers and enlisted men in preventive measures, by better clothing and equipment, and by improved techniques in the management of cases. Protective and sanitary measures have reduced the toll from the epidemic diseases, not only among military personnel but also among the civilian population of Korea. Altogether, the advances made through experience and research in safeguarding the health and life of our armed forces during the Korean War contribute a new chapter to the history of military medicine."

T. W.

REDISTRIBUTION OF PHYSICIANS IN THE ARMED FORCES

Redistribution to the Navy and Air Force of approximately 500 volunteer doctors recently commissioned in the Army is being undertaken, the Department of Defense announced in September.

The rather large number of available volunteers is due to the number of physicians who shortly after the Doctor Draft Act was extended for an additional two years, and after the August draft call was announced, decided to volunteer for service now rather than wait until called by their draft boards.

An additional reason cited by the Department is that many of the doctors now on duty in the Army who are entitled to early release under the new Doctor Draft Act are not taking advantage of this opportunity. A sharp decrease in the number of physicians being granted deferments for additional professional training also contributes to the present situation.

The Navy and Air Force recently have not been accepting volunteers since both of these services temporarily had a number of physicians adequate to meet their needs. Because of scheduled losses, however, these services are now in a position to use some of the Army's volunteers.

In so far as possible, the redistribution will be accomplished by voluntary interservice transfer, that is, by transferring the commissions of the doctors concerned from the Army to the Navy and Air Force. However, if the number of physicians desiring interservice transfer is insufficient, then it may be necessary to detail some Army doctors to duty with the Navy and Air Force.

No further draft calls for physicians will be made and no more volunteer medical officers accepted until such time as losses create new vacancies.

MILE POSTS TO HEALTH

The District of Columbia Survey of Medical Care for the Indigent and Related Services*

NURSING

Nursing care for the indigent in the District of Columbia was considered by the committee to be the nursing service available in (1) the 1 Municipal Hospital, 1 Federal Hospital and 8 hospitals used for contract services; (2) clinic services available through these hospitals and through clinics operated by the District of Columbia Health Department, as well as (3) services of the public health nurses employed by the Health Department and by the Instructive Visiting Nurse Society of the District of Columbia.

It was the belief of the committee that nursing services rendered through these hospitals, the Health Department, and the voluntary nursing agency were based on the available personnel and the nursing needs of patients and not on the ability of the individual to pay. For this reason no independent study was undertaken by the committee, and this summary, as well as the committee's total report, is based on findings of the survey sponsored by the Graduate Nurses' Association, the League of Nursing Education, and the Nurses' Examining Board of the District of Columbia. The report of this survey, released in October 1952, is entitled, "Nursing in the Nation's Capital, A Survey of Needs and Resources in the District of Columbia."

Problems in nursing care in the District of Columbia are in relation to:

1. *Supply.* It was recommended for hospitals and public health agencies that additional positions be budgeted to bring the supply of nursing service up to nationally accepted standards. In the case of hospital nursing service the immediate goal to be attained is that of supplying an average of 3.5 hours of care per patient in each 24 hours. The standard accepted for determining the number of public health nurses needed was in the ratio of 1 public health nurse for each 2,000 of the population for a generalized public health nursing program, including nursing care to patients in their homes.

2. *Kinds of nursing service required.* The committee accepted as an immediate goal to be recommended the attainment of a ratio of 65 per cent professional to 35 per cent nonprofessional personnel for hospital nursing service. It was recommended that the District of Columbia continue to study its nursing needs in relation to services required and types of nursing personnel to be trained and employed for nursing service in hospitals.

3. Nursing care to patients in their homes and nursing care in convalescent and nursing homes are problems which the committee recommends should receive further study with particular reference to the number of public health nurses necessary and the fullest possible utilization of the services of the Instructive Visiting Nurse Society.

4. *Licensure for practical nurses.* The committee recommended licensure for practical nurses for the protection of the public, to give status to the practical nurse, and to encourage recruitment to this field of nursing.

RECOMMENDATIONS OF THE NURSING COMMITTEE

NURSING CARE IN HOSPITALS

It is recommended:

1. That immediate attempts be made to secure a minimum of 3.5 hours of nursing care per patient in 24 hours in the hospitals in the District of Columbia by releasing nurses from non-nursing duties.

2. That an effective, detailed and specific study and analysis be made in the hospitals in the District of Columbia to determine the hours of nursing care that are actually being provided directly to the patient at his bedside, and the amount that is currently needed to meet his needs. (Funds for such a study, preferably by an impartial and objective nursing expert, might be secured from some philanthropic foundation or from the American Nurses' Association on recommendation of the Graduate Nurses' Association of D. C.)

3. That steps be taken to increase the amount of nursing care that is given by professional nurses so that the ratio of professional to nonprofessional services more nearly approximates the national standard of 65 per cent to 35 per cent by seeking increases in budgets for professional nursing personnel.

4. That legislation to provide for licensure of

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* Abbreviated portions of the report of the Survey have been appearing in the MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA from month to month. This is the fifth installment.

practical nurses and schools of practical nursing be introduced as soon as possible.

NURSING SERVICE IN CLINICS

5. That an effort be made to secure the services of nurses who are adequately prepared in the areas of teaching and the preventative and rehabilitation aspects of nursing care.

6. That in the interest of economy, all health teaching be coördinated. This includes teaching done by doctors, nurses, nutritionists, social workers, physical therapists and other specialists. We, therefore, recommend that an increased effort be made in this direction.

7. That more attention be directed to the administration of clinics, including the development of uniform procedures for clinic referral and the improvement of physical facilities, and that provision be made in budgets for more paid medical service.

NURSING CARE IN HOMES

8. That the number of public health nurses in the community be increased. It is expected that the number of nurses required by the Health Department and by the Instructive Visiting Nurse Society respectively will be determined after a realignment of responsibilities has been made, and will to some extent depend upon the amount and source of financial support which can be made available to each nursing service.

9. That an effort be made through joint planning in the community to meet the need for nursing service in homes. This would imply joint activities by the Health Officer, the Advisory Board of the Bureau of Public Health Nursing, and Board of Directors of the Instructive Visiting Nurse Society. Every effort should be made to utilize the services of the Instructive Visiting Nurse Society, the voluntary agency in this field, to the fullest possible extent.*

10. That an effective, detailed and specific study and analysis be made of public health nursing in the District of Columbia to determine the amount of service that is currently required to meet the needs of the public.

Medical Social Service

The social and emotional factors influence strongly the ability of the person to make use of medical care and to benefit from that which is made available to him. With the frequent conflict that people face between their health needs and the needs of their families or their own needs to see themselves as competent and fully capable individuals, it is not strange that medical recommendations may be difficult to follow or a state of health hard to obtain. But without help in understanding and accepting these feelings, the medical care is frequently not used effectively and this individual is not able to gain the maximum benefit from it.

Case work service, of course, is of primary importance since the skill and understanding of the case worker are utilized in the inter-personal relationship to help the individual to recognize and accept his feelings and problems and to mobilize his inner and outer resources to meet the situation as it is. Despite the fact that this function alone is of prime importance to the person in need of help, many other functions aid in enhancing the type of service he will receive. Participation in program planning and policy formulation and in the development of social and health programs in the community may not bring him into direct contact with the medical social worker, but may affect considerably the experiences that he has in seeking care or the resources that may be available to meet some of his needs.

In view of the knowledge of the intimate relationship between illness and social breakdown and between social problems and the illness they may tend to create, consideration should be given by hospitals without social service departments to the development of medical social services by a professionally trained medical social staff to whom is delegated appropriate professional functions to help meet the social and emotional needs of patients.

Too often in this review, social service units have been used to weigh the individual's income and period of residency against established eligibility standards and, where this has involved a professionally trained staff, it appears to be an extravagant use of a discipline more urgently needed in teamwork with the physician and other professional personnel in meeting the needs of the ill person. It is recommended that no direct responsibility in the admissions process be delegated to medical social service units as such responsibility is not an appropriate function of medical social work. However, it is essential that medical social service participate in program planning and policy making regarding the admissions process; that medical social consultation be made available on a continuing basis; that direct social case work service should also be available on referral from the admitting office.

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* This sentence was added by the Executive Committee.

In view of the acute need as revealed to us in the material submitted, immediate consideration should be given to overcoming the serious medical social personnel shortages in the Municipal Hospital and in the Tuberculosis Program.

It is also recommended that the directors of the medical social units consider studying jointly the value of advisory committees, their composition, their use in policy formulation, their value as a means of interpretation, and their contribution in the field of public relations.

In order to participate in the over-all health and medical care program planning and to offer consultation in the development of medical social services, we recommend that consideration be given to the need for a very well qualified medical social worker at an executive level in the District Government to provide this leadership and to assist in the coördination of the existing medical social services.

The Technical Committee recommended that following this study, the local chapter of American Association of Medical Social Workers assume leadership in the further review and consideration of those areas of professional practice that may be of particular concern to the professional group itself.

Recommendations of Medical Social Service Committee

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2. Too often in this review, social service units have been used to weigh the individual's income and period of residency against established eligibility standards and, where this has involved a professionally trained staff, it appears to be an extravagant use of a discipline more urgently needed in teamwork with the physician and other professional personnel in meeting the needs of the ill person. We recommend that no direct responsibility in the admissions process be delegated to medical social service units as such responsibility is not an appropriate function of medical social work. However, it is essential that medical social service participate in program planning and policy making regarding the admission process; that medical social consultation be made available on a continuing basis; that direct social case work service should also be available on referral from the admitting office.

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6. We recommend that following this study, the local chapter of American Association of Medical Social Workers assume leadership in the further review and consideration of those areas of professional practice that may be of particular concern to the professional group itself.

Survey of Statistical Activities

The primary aim of this survey was to appraise and evaluate the statistical activities of the District of Columbia Department of Health.

At the present time the statistical activities and services, such as they are, are carried out in the program divisions with no coördination and with limited facilities.

A general criticism of the statistical activities in the District of Columbia Department of Health is

Calendar of Meetings, August 16–September 15, 1953

August 18	Registered X-ray Technicians of Washington
September 4	Committee on Attendance, Annual Scientific Assembly
September 8	Doctors' Chorus, ASA Medical Officers' Reserve Units
September 10	Committee on Social Affairs, ASA
September 11	Committee on Public Information Washington Psychiatric Society
September 14	Subcommittee on Maternal Welfare
September 15	Grievance Committee

the lack of organization. The end product of statistics—analysis—is not being achieved for a large amount of the tabulated reports. A great quantity of expensive tabulations remain informationally sterile because they have not been studied, summarized, and interpreted. There is no apparent coördination of the statistical functions between the bureaus of the Health Department. As a result, certain groups of statistics which are inherently related are not linked administratively when tabulations are performed in separate bureaus.

During the last decade the field of public health statistics has expanded rapidly. The scope of a modern health statistics program, the variety of services requested and made available, and the complexity of operations all demand a well-organized structure. At one time, when the Health Department program was limited to recording and tabulation of birth and death records, the organization needed to carry out the program was simple. The expansion of statistical requirements associated with the normal progress of the work of the Department has reached a stage where the present arrangement is not adequate.

With the increased volume of work, both in records and statistical services, a different type of organization is required—one which will give the program directors more time for program planning and provide for liaison with other bureaus requiring statistical services.

A Statistical Services Bureau should provide these special program skills: (1) record or form design, (2) design of study, (3) statistical processing, and (4) statistical analysis. The centralized organization is effective in health departments with limited budgets and personnel, and is the type recommended for the District of Columbia Health Department.

The coördinated record and statistics program should be headed by a public health statistician who has demonstrated ability as an administrator; demonstrated technical knowledge, a broad viewpoint, and imagination in the development and use of public health statistics.

Statistical Activities—D. C. Health Department

1. *Coördinate statistical services on a bureau level.* A Bio-statistical and Research Bureau should provide these special program skills: (1) record or form design, (2) design of study, (3) statistical processing, and (4) statistical analysis. The centralized organization is effective in health departments with limited budgets and personnel, and is the type recommended for the District of Columbia Health Department. As well demonstrated in many local and state Health Departments, the centralized statistical services unit furnishes, on a coöperative cost basis, needed services to all bureaus in the essentials of statistical consulting service, program planning, and analysis of statistics. The program skills offered by such a service should be utilized by all bureaus in the Health Department to their fullest extent. Where such a program operates as it is intended, there will be effective inter-relations of records and statistics of birth, mortality, morbidity, tuberculosis, communicable diseases, cancer, maternal and child health, medical care, service activities, and cost data.

2. *Adequately staff, house, and equip Statistical Services Bureau.* The coördinated record and statistics program should be headed by a public health statistician who has demonstrated ability as an administrator; demonstrated technical knowledge, a broad viewpoint, and imagination in the development and use of public health statistics.

As the program develops, additional equipment and personnel will be required. The surveyor is not recommending what equipment and personnel are needed, as this should be the judgment of the statistician who heads the recommended bureau.

DR. PEABODY HONORED AT GLENN DALE

Dr. J. Winthrop Peabody, Chief Visiting Consultant at Glenn Dale Sanatorium since 1939, terminated his services in that capacity on August 31 in order to devote more time to his private practice and to various organizational activities in which he is interested. A party in his honor was held at Glenn Dale, August 31. Among those who spoke were District Commissioner Renah F. Camalier and Health Officer Daniel L. Seckinger.

Although relinquishing his past duties, Dr. Peabody accepted the position of consultant and will visit Glenn Dale once a week for chest conferences.

Dr. Peabody has constantly worked toward better community care for tuberculous patients in the District of Columbia. On June 1, 1916, two years after his graduation from Georgetown University School of Medicine, he was appointed resident physician at the Tuberculosis Hospital in Washington; later he became Chief Medical Officer, and in September 1921, Superintendent. Along with this position he held two others, Director of the Tuberculosis Clinic of the District Health Department and Director of the Tuberculosis Camp for Children (a project of the District of Columbia Tuberculosis Association). As the Clinic outgrew its mode of operation he petitioned the Health Officer and the District of Columbia Commissioners to appropriate funds for its complete reorganization, including a full-time physician as tuberculosis control officer. When this was accomplished he resigned in January, 1936, as Director of the Tuberculosis Clinic.

When the Tuberculosis Hospital could not provide enough beds for tuberculous patients, Dr. Peabody urged the Board of Public Welfare to set aside a ward for such cases in the old Gallinger Hospital, and as a result of his efforts, there is now a Tuberculosis Building in that institution.

Dr. Peabody was appointed Chairman of the Medical Committee by the District of Columbia Commissioners to assist the architect with plans for a new hospital (Glenn Dale) to meet the needs of tuberculous patients in the District of Columbia. In 1934 he was made General Superintendent of Glenn Dale Sanatorium. Upon completion of the new hospital and its approval by the AMA—the goal of his ambition realized—he resigned in 1939 to accept the part-time position of Chief Visiting Consultant.

Dr. Peabody has been a member of the faculty of Georgetown University School of Medicine since 1921 and is presently Professor of Diseases of the Respiratory System.

He is a member of the Founders' Group of the American College of Chest Physicians, an organization dear in his affections and to which he has devoted his talents unstintingly. He was President of the College from 1942 to 1944 and has been Chairman of the Council on Postgraduate Medical Education since 1944.

J. WINTHROP PEABODY, M.D.

Dr. Peabody was a member of a committee of chest specialists which succeeded in creating a Section on Diseases of the Chest in the AMA. He served as Secretary at the organizational meeting and was Chairman of the Section in 1951–52. He is presently a member of the Executive Committee of the Section.

He is Associate Editor of the Journal, *Diseases of the Chest*. He is the author of many papers on diseases of the chest and a contributor to several textbooks.

His son, Dr. J. Winthrop Peabody, Jr., is at present Resident in Thoracic Surgery at the U. S. Veterans Hospital in Oteen, North Carolina.

News and Personals

The 1953 Annual Meeting of the Eastern Section of the American Trudeau Society will be held in Portland, Maine, October 23 and 24. Headquarters and meeting place will be the Eastland Hotel. Reservations should be made directly with the Hotel. All members of the Eastern Section of the American Trudeau Society and interested physicians are invited to attend.

The Sixth Annual Postgraduate Course on Diseases of the Chest, sponsored by the Council on Postgraduate Medical Education of the American College of Chest Physicians, with the coöperation of the New York State Chapter of the College and the members of the faculties and staffs of the medical schools and hospitals of New York City, will be held at the Hotel New Yorker, New York City, November 2–6, 1953. **Dr. J. Winthrop Peabody,** Chairman of the Council on Postgraduate Education, will be moderator at the opening session, November 2. Later in the morning Dr. Peabody will serve as moderator for a round table on the Application of Basic Sciences to Clinical Problems of Pulmonary Disease.

The 60th Annual Meeting of the Association of Military Surgeons will convene at the Hotel Statler, November 8–11, 1953. Rear Admiral Winchell McK. Craig, MC, USNR, President of the Association, will open the meeting at 9 a.m., Monday, November 9, in the Presidential Ballroom.

Reserve credit points may be earned by Medical Service reserve officers on inactive duty for attendance at the daily sessions on the basis of one point for each day of attendance, provided sessions attended total more than 2 hours. Each day of the meeting will be considered a session.

The Scientific Council of the Washington Heart Association will hold its first meeting of the fall, October 28, at George Washington University School of Medicine, 1335 H Street, N.W., at 8 p.m. A series of five papers on clinical programs in cardiovascular disease will be presented.

The 1953 Annual Convention of the National Society for Crippled Children and Adults will be held in Chicago at the Palmer House, November 12–14. Dr. Edward J. McCormick, President of the American Medical Association, who has served for four years as counselor to the National Society from the AMA, will head the list of distinguished speakers scheduled to discuss the care, treatment and training of crippled children. Architecture and its adaptations to meet the needs of the crippled will be featured for the first time at this year's meeting.

The Fourth Mid-Eastern Conference of X-ray Technicians will convene in Washington, D. C., at the Hotel Statler, November 13, 14 and 15, with the Washington, D. C. Society as host. The Saturday luncheon will honor the radiologists of the Greater Washington Metropolitan Area. Evelyn H. Yurcessen, R.T., is General Chairman for the 1953 Convention.

Dr. John A. Reisinger, Chairman of the **Washington Heart Association's Research Committee,** calls attention to the fact that applications for the Association's **Fellowship in Clinical Cardiology** must reach the committee by November 1, 1953.

Doctors of medicine are eligible if they have successfully completed a general internship of at least one year, or its equivalent, and have had at least one additional year of residency in medicine, or its equivalent. The fellowship carries a stipend of $3,600 a year, payable directly to the fellow, and can be served in any institution acceptable to the Association. The award will be made prior to January 1, 1954, for the fellowship beginning July 1 following. Application forms and further information may be secured by writing to Miss Beatrice Hodgson, Executive Director, Washington Heart Association, 1154 19th Street, N.W., Washington, D. C.

The American Society for the Study of Sterility announces the opening of the 1954 contest for the most outstanding contribution on the subject of infertility and sterility. The winner will receive a cash award of $1,000, the essay to appear on the program of the 1954 meeting of the Society. Full particulars concerning contest requirements may be secured from the Secretary of the Society, Dr. Herbert H. Thomas, 920 South 19th Street, Birmingham, Alabama. Manuscripts submitted in this competition must be in the hands of the Secretary not later than March 1, 1954.

Regular officers of the Army Medical Service may resign and leave the service under a new and more liberal Army policy. Beginning with officers having the longest periods of service, a number will be allowed to resign each month, upon recommendation of the Surgeon General, provided they have met with certain service requirements. Previously, resignations were accepted only in cases of extreme hardship.

According to the new policy, regular officers who have no obligatory commitments to the Army and have served in the Regular Army for a period of three years are eligible for release. However, if they have served for less than 8 years, they must accept commissions in the Reserve.

The Executive Board of the Medical Society of the District of Columbia met in regular session, August 11, 1953. At that meeting it approved the recommendation of the Committee on Public Information that an award be created "to be known by the name of a physician and member of the Society who has been outstanding, both in his profession and as a citizen of the District of Columbia," and that the award should consist of a certificate and a medal as proposed by the Committee. The Board voted further that the Award be designated the John Benjamin Nichols Award. The Chairman recounted that Dr. Nichols had been a member of the Society for more than 50 years, was a Past President of the Society, the author of Volume II of the Society's History, and had been held in high esteem by his contemporaries as an able clinician and educator for the last half century.

At the request of Dr. Karl C. Corley, Chairman of the Committee on Medical Education Fund, the Board voted to rescind its previous action to recommend to the Society that it assess Active members $10 annually for the American Medical Education Fund but that the Committee be urged to continue soliciting voluntary contributions from members.

President Ramsey called attention to Reorganization Order No. 60 which he had received from the Executive Offices of the District Government on July 28, 1953, which provided for the establishment of a committee of citizens to be known as the Public Health Advisory Council. The Board voted to empower the President of the Society and the Chairman of the Board to select the nominee in the name of the Board. Dr. Hugh H. Hussey was the nominee chosen.

In line with the reorganization of the District Health Department, the Commissioners appointed its new 9-member **Public Health Advisory Council** on September 15. The appointees are:

Dr. Hugh H. Hussey, Editor of GP and Associate Professor of Medicine, Georgetown University School of Medicine

Dr. W. Montague Cobb, Professor of Anatomy, Howard University School of Medicine

Dr. C. V. Rault, Dean of Georgetown University School of Dentistry

Alfred McGarraghy, restaurateur

Herman A. Johnson, civic leader and former Assistant Superintendent of Freedmen's Hospital

Mrs. Henry A. Bartlett, First Vice President of the Federation of Citizens' Associations

Major Omar W. Clark, former Assistant Director of the Veterans Administration and head of a special advisory committee that recently surveyed municipal hospitals

Miss Ruth A. Heintzelman, of the medical service staff of the Civil Service Commission

Professor Benjamin C. Cruickshanks, mechanical engineer of the George Washington University faculty.

The members were sworn in, October 6, in the District Building Board Room.

One hundred medical students, the largest freshman class in the history of **George Washington University School of Medicine,** gathered for the opening exercises of the School's 130th opening assembly, September 21, at 11 a.m., in Hall A of the School of Medicine. Six women are members of the freshman class. There are students from several foreign countries, including China, Norway, Germany, Lebanon and Japan. The Medical School's total enrollment for the 1953 54 session is 350.

Dr. Walter A. Bloedorn, Dean of the School of Medicine, presided at the opening ceremonies. Dr.

Cloyd H. Marvin, President of the University, gave the official welcome to new and returning students and to the honored guests. Dean Bloedorn extended greetings and in a brief talk stressed the need for a new Medical School building—"a modern physical plant to house one of the finest schools of medicine in this country."

The Honorable Melvin E. Casberg, Assistant Secretary of Defense, gave the principal address on "The Art of Medicine," as contrasted with the science of medicine.

Following the exercises Dean Bloedorn was host at a luncheon honoring the guest speaker at the Mayflower Hotel. Present were members of the Medical School staff and leaders from the armed forces medical services, the Veterans Administration, the Public Health Service, the National Institutes of Health, and other governmental and private medical services.

Georgetown University Hospital announces the appointment of Sister Mary Evangelist, S.C.N., Administrator of the Hospital as of September 9. She replaces Sister Mary Antonella, S.C.N., whose term of office has expired. Sister Mary Evangelist has been serving as Assistant Administrator and Purchasing Agent at the Hospital. At the annual convocation ceremonies of the American College of Hospital Administrators in San Francisco recently, she was elected a member of the College.

A small pamphlet entitled, **"Answers to Questions from Physicians about Trudeau Sanatorium"** has been mailed to physicians east of the Mississippi in anticipation of the 70th anniversary of the Sanatorium's opening, to be celebrated in 1954. Physicians who have not received the pamphlet may secure one by writing to Dr. Roger S. Mitchell, Clinical Director, Trudeau Sanatorium, Trudeau, New York.

Quoting from the text pamphlet, Trudeau Sanatorium "was established 70 years ago by Dr. Edward Livingston Trudeau, a pioneer in the research and clinical aspects of tuberculosis. It has grown, in that time, from one cottage accommodating 2 patients to a village of 52 buildings with a capacity of 175 patients."

The pamphlet answers questions regarding cost of medical care at this institution, type of therapy currently in use, advantages to the patient, and how to refer a patient to Trudeau.

Sponsored by Help for Retarded Children, Inc., an organization of parents and friends of retarded children, **Sunnyday School,** located at 4700 Norwood Drive, in the Bethesda-Chevy Chase Recreation Center, began its fourth session, September 21.

Sunnyday School is intended for children who have not had an opportunity for education and training because of their limited mental development. It is approved by the Maryland State Department of Education and has been used for teacher-training by the University of Maryland Department of Special Education.

Help for Retarded Children, Inc., Box 163, Garrett Park, Maryland, is affiliated with the National Association for Retarded Children and is also a member of United Community Services. It holds monthly meetings at the Health, Education and Welfare Building at 3rd and C Streets, S.W., at 8 p.m., the third Thursday of each month. Further information can be obtained by calling Emerson 3-2087.

Georgetown University is the recipient of the books, papers and manuscripts of the late Dr. Alexis Carrel, French surgeon and Nobel Prize winner. These were presented to the University, September 13, at convocation exercises of the School of Medicine in Gaston Hall. A letter of presentation from Mrs. Carrel addressed to the Very Reverend Edward B. Bunn, S.J., President of Georgetown, was read at the meeting.

Dr. J. Winthrop Peabody, Chairman of the Postgraduate Council of the American College of Chest Physicians, participated in a course on Diseases of the Chest presented by the American College of Chest Physicians in conjunction with the American Academy of General Practice of Western Pennsylvania. The meetings were held at the Pittsburgher Hotel in Pittsburgh, Penna., on four successive Sundays, September 13, 20, 27 and October 4. Dr. Peabody opened the scientific session on September 13 and presented a paper on "Value of Rest in Treatment of Tuberculosis."

Dr. John A. Reed, who was reëlected Secretary of the American Diabetes Association for the fifth consecutive year last May, has been reappointed Chairman of the Association's Committee on Detection and Education. Dr. Reed will spearhead plans for **Diabetes Week, November 15–21,** which is the Nation-wide drive by the Association to find an estimated million undetected cases of diabetes.

Rear Admiral Arthur H. Dearing, USN (ret.), has been appointed **Executive Secretary of the College of American Pathologists.** Admiral Dearing completed 35 years of Naval service last June and has had wide experience in the fields of medicine and medical administration. During World War II he was senior medical officer on the staff of Admirals Ghormley and Halsey.

Admiral Dearing is a former member of the Board of Governors of the Armed Forces Institute of Pathology and is presently serving on the Board of Governors of the American College of Surgeons.

Dr. Ronald A. Cox, Professor of Ophthalmology at George Washington University School of Medicine, has been invited to assist in examining candidates for certification by the American Board of Ophthalmology at the annual convention of the American Academy of Ophthalmology in Chicago in October.

Dr. Cox was recently appointed ophthalmic consultant to the National Institutes of Health in Bethesda.

Colonel Raymond Maret was awarded the Legion of Merit, September 3, for outstanding service as Commanding Officer of the 382nd General Hospital in Japan. The award was made by Major General Leonard D. Heaton, Commanding General of Walter Reed Army Medical Center.

Colonel Maret commanded the hospital unit in Japan from March, 1951 to May, 1953. A graduate of Georgetown University School of Medicine, he practiced medicine in Washington before World War II. He resumed his practice in Washington after the War until recalled to active duty in 1950.

Dr. Zigmond M. Lebensohn delivered a series of lectures on "Psychiatry and the Law" at the Veterans Administration Hospitals in Marion, Indiana; Sheridan, Wyoming; and Salt Lake City, Utah, during the course of a Western tour in July and August.

The Public Relations Institute sponsored by the American Medical Association, in Chicago, at the Drake Hotel, September 2 and 3, was attended by **Theodore Wiprud, Secretary, and Lawrence A. Zupan, Assistant Secretary,** of the District Medical Society.

Dr. William T. Gibb represented the Medical Society of the District of Columbia at the **Eighth National Conference on Citizenship** in Washington, September 17, 18 and 19.

Dr. Charles P. Ryland, President of the D. C. Rheumatism Society, attended the Eighth International Congress of Rheumatic Diseases, which met in Geneva, Switzerland, August 24–28, 1953. While in Europe, Dr. Ryland toured England and France.

Dr. Charles P. Howze, Washington urologist since 1929, will open his office for practice in Charlottesville, Virginia, at 401 East High Street, beginning November 1. Dr. Howze is a graduate of the University of Virginia School of Medicine and the Brady Urological Institute. He served on the staff of George Washington University School of Medicine as Associate in Urology from 1932 to 1945. He will reside at 919 Rugby Road.

Dr. Prentiss Willson, Jr. left Washington by auto on September 30 en route to San Luis Obispo, California, where he will be affiliated with a medical clinic in the practice of his specialty, obstetrics and gynecology.

MEMBERSHIP

The following applicants for membership were duly elected to membership at the meeting of the Executive Board, August 11, 1953, in accord with Amendment XI, Section 2, of the Constitution and By-laws of the Society.

Active Members

John P. Adams, 1703 Rhode Island Avenue, N.W.
Randolph Ke ley Brown, Freedmen's Hospital
W. Montague Cobb, 1221 Girard Street, N.W.
Bernard Robert Cooperman, 1726 Eye Street, N.W.
Thomas G. Edison, 1801 Eye Street, N.W.
W. Luther Hall, 1150 Connecticut Avenue, N.W.
Joseph L. Johnson, 1830 Sixteenth Street, N.W.

Bernard Kapiloff, 915 19th Street, N.W.
Lorin E. Kerr, 907 15th Street, N.W.
Frank P. Lloyd, 1011 S Street, N.W.
Ira Weiss Pearlman, 4419 17th Street, N.W.
Clemmer M. Peck, 9808 Dilston Road, Silver Spring, Md.
Robert Stewart Randall, 645 Kenyon Street, N.W.
Alvin F. Robinson, 1006 Rhode Island Avenue, N.W.
Charles J. Savarese, Jr., George Washington University Hospital
Frank H. Small III, 911 Heron Drive, Silver Spring, Md.

Associate Members

Paul B. Bender, 5028 South 12th Street, Arlington, Va.
Charles Farwell, 12126 Viers Mill Road, Silver Spring, Md.
Jack Emil Geist, 918 Ellsworth Drive, Silver Spring, Md.
August Carl Herman, 3908 Second Street, S.W.
Byron H. Johnson, 49 Beverly Road, Buffalo, New York
Joseph A. Kiesel, 6913 34th Street, Falls Church, Va.
Charles F. McCaffrey, 4739 North Washington Boulevard, Arlington, Va.
Benjamin Miller, 1518 Community Drive, Alexandria, Va.
Bernard Rudolph G. Nebel, 1412 North Rolfe Street, Arlington, Va.
Harold Segall, 11301 Georgia Avenue, Wheaton, Md.

Resident-Intern Member

Sam C. Pascoe, 1122 John Marshall Drive, Falls Church, Va.

BOOK REVIEW

The Surgery of Infancy and Childhood; Its Principles and Techniques. Robert E. Gross, M.D., D.Sc., William E. Ladd Professor of Children's Surgery, The Harvard Medical School; Chief of Surgical Service, The Children's Hospital, Boston. Price, $16.00. Pp. 1000, with 1488 illustrations on 567 figures. Drawings by Etta Piotti. Philadelphia: Saunders, 1953.

This volume is the long-awaited successor to Ladd and Gross' "Abdominal Surgery of Infancy and Childhood," published in 1941 and subsequently never revised. The purposes of the book are well stated by Dr. Gross at the outset. First, it is a summary of the material that the Surgical Service of the Children's Hospital, Boston, has been called upon to treat. Second, and more important seemingly, the book purports to make available to the medical profession whatever has been learned at the aforementioned institution about the various surgical conditions in infancy and childhood. Further, no effort has been made to include and discuss all controversial views which are represented in the literature. There is no wish to minimize the importance of the writings of others; however, the view presented is that which the author and his associates felt was most suitable for their handling of various diseases and abnormalities.

The arrangement of the text is logical. The first chapters are concerned with general subjects such as pre- and postoperative care, anesthesia and surgery in premature infants. The next grouping is that of diseases of the alimentary canal. Another grouping is that of general abdominal diseases and abnormalities. There is a further section on surgery of the genitalia and urinary system. The final section covers surgery of the thorax and the last chapter discusses wringer injuries of the arm.

There is no discussion of neurologic or orthopedic surgical subjects. Each chapter has a clinical and roentgenographic description. Pre- and postoperative care are discussed before a presentation of surgical technic, complete with illustrations, is finally given. In general, the photographs with the accompanying drawings of surgical technic are excellent.

The format of the book is good and the arrangement is logical. The type used makes for easier reading; there is a notable absence of the "crowded" feeling as experienced in many textbooks. The volume is recommended for medical students, interns and residents interested in pediatric surgery, as well as practicing physicians doing pediatrics. It should also be of interest to surgeons doing pediatric surgery.

Ira W. Pearlman, M.D.

BOOKS RECEIVED

Acknowledgment is made of the following books which have recently been received. Selections will be made for more extensive review in the interests of our readers and as space permits. Physicians are urged to submit reviews of additional current books which, in their opinion, merit comment.

The Book of Health. A Medical Encyclopedia for Everyone. Compiled and edited by Randolph Lee Clark, Jr., B.S., M.D., M.Sc. (Surgery), Houston, Texas, Director and Surgeon-in-Chief, The University of Texas, M. D. Anderson Hospital for Cancer Research; Professor of Surgery, The University of Texas, Post-Graduate School of Medicine; Fellow of the American College of Surgeons; National Consultant in Surgery, United States Air Force; and Russell W. Cumley, B.A., M.A., Ph.D., Houston, Texas, Director of Publications, The University of Texas, M. D. Anderson Hospital for Cancer Research; Professor of Medical Journalism, The University of Texas, Post-Graduate School of Medicine. Price, $10.00. Pp. 834, with 1,400 illustrations. Houston and New York: Elsevier Press, 1953.

Mechanisms of Urologic Disease. David M. Davis, M.D., Professor of Urology Emeritus, Jefferson Medical College; Visiting Lecturer in Urology, Graduate School of Medicine, University of Pennsylvania; formerly Pathologist and Director of Research, James Buchanan Brady Urological Institute, Johns Hopkins University; Assistant Professor of Urological Surgery, in charge of Urology, University of Rochester; Nathan Lewis Hatfield Professor of Urology, Jefferson Medical College. Price, $4.50. Pp. 156. Philadelphia: Saunders, 1953.

The Obstetrical Forceps. A Monograph in The Bannerstone Division of American Lectures in Gynecology and Obstetrics. L. V. Dill, M.D., F.A.C.S., Head, Obstetrics and Gynecology, Yater Clinic; Assistant Professor, Obstetrics and Gynecology, Georgetown University School of Medicine; Consultant, Obstetrics and Gynecology, Army Medical School and Walter Reed General Hospital; Staff Member, Obstetrics and Gynecology, Providence Hospital, Washington, D. C.; formerly, Instructor in Obstetrics and Gynecology, Cornell University Medical College, New York, New York. Edited by E. C. Hamblen, B. S., M.D., F.A.C.S., Professor of Endocrinology, Associate Professor of Obstetrics and Gynecology, Duke University School of Medicine; Chief of the Division of Endocrinology and Endocrinologist, Duke Hospital, Durham, North Carolina. Price, $5.25. Pp. 156. Springfield, Ill.: Thomas, 1953.

The Epidemiology of Health; A New York Academy of Medicine Book. Iago Galdston, M.D., Editor. Price, $4.00. Pp. 197. New York: Health Education Council, 1953.

Sexual Behavior in the Human Female. Alfred C. Kinsey, Wardell B. Pomeroy, Clyde E. Martin, and Paul H. Gebhard, Research Associates, and others on the Staff of the Institute for Sex Research, Indiana University. Price, $8.00. Pp. 842, with 151 charts, 179 tables, and 4 illustrations. Philadelphia: Saunders, 1953.

May's Manual of the Diseases of the Eye for Students and General Practitioners, 21st ed., revised and edited by Charles A. Perera, M.D., Associate Clinical Professor, College of Physicians and Surgeons, Columbia University, New York; Attending Ophthalmologist, Presbyterian Hospital, New York. Price, $6.00. Pp. 512, with 378 illustrations, including 32 plates, with 93 colored figures. Baltimore: Williams & Wilkins, 1953.

The Nursing Mother: A Guide to Successful Breast Feeding. Frank Howard Richardson, M.D., Licentiate, American Board of Pediatrics, F.A.C.P., F.A.A.P. Price $2.95. Pp. 204. New York: Prentice-Hall, 1953.

Living with a Disability. Howard A. Rusk, M.D., and Eugene J. Taylor, in collaboration with Muriel Zimmerman, O.T.R., and Julia Judson, M.S., The Institute of Physical Medicine and Rehabilitation, New York University-Bellevue Medical Center. Price, $3.50. Pp. 207. Garden City, N. Y.: Blakiston, 1953.

Peptic Ulcer: Pain Patterns, Diagnosis and Medical Treatment. Lucian A. Smith, A.B., M.D., M.S. in Medicine, F.A.C.P., Assistant Professor of Medicine, Mayo Foundation; Head of Section, Division of Medicine, Mayo Clinic; and Andrew B. Rivers, M.A., M.D., M.S. in Medicine, F.A.C.P., Late Associate Professor of Medicine, Mayo Foundation; Consultant, Division of Medicine, Mayo Clinic, Rochester, Minnesota. Foreword by George B. Eusterman. Price, $12.50. Pp. 576. New York: Appleton, 1953.

Respiratory Diseases and Allergy: New Method of Approach. Joseph S. Smul, M.D., Author of "Digestive Diseases and Food Allergy"; Fellow, National Gastro-Enterological Association; Member, New York Academy of Sciences; Formerly Vice President, Manhattan Roentgen Ray Society; Associate in Gastro-Enterology, Beth David Hospital; Clinical Assistant Physician, Beth Israel Hospital. Price, $2.75. Pp. 80. New York: Medical Library Co., 1953.

Steps Forward: Proceedings of the Fourth Mental Hospital Institute held under the auspices of the Mental Hospital Service of the American Psychiatric Association, Deshler-Wallick Hotel, Columbus, Ohio, October 20–23, 1952. Edited by Daniel Blain, M.D., Medical Director, A.P.A., with the staff of the A.P.A. Mental Hospital Service. Paper bound. Pp. 242. Washington, D. C.: American Psychiatric Association, 1953.

JOHN THOMAS KELLEY, Jr., M.D., F.A.C.S.

(1863–1953)

Dr. John Thomas Kelley, Jr., Washington physician and surgeon for more than 60 years, died, July 30, 1953, at his home, 2300 California Street, N. W., after a brief illness.

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Dr. Kelley was born to John Thomas and Susan Appleby Kelley in Georgetown, D.C., December 7, 1863. He was educated at the Andrew Small Academy, in Darnestown, Maryland, and attended Lafayette College, in Easton, Pa. He received his medical degree from Columbian (now George Washington) University in 1890.

He interned at Children's Hospital and Columbia Hospital for Women, and was resident physician at the latter institution from 1892 to 1894. He was in general practice in the District of Columbia for some 15 years before specializing in gynecologic surgery. He had retired from surgery about three years ago but had continued his general practice until he became ill a few weeks before his death. Since before 1900 he had maintained offices at 1312 Fifteenth Street, N. W.

Dr. Kelley was gynecologist, later Chief of Gynecology, at Providence Hospital from 1909 to 1945, and for many years was gynecologist at Georgetown and Columbia Hospitals.

A teacher as well as practitioner, Dr. Kelley was on the teaching staff of Georgetown University School of Medicine from 1907 until 1932. At the time of his death he was Professor of Gynecology, Emeritus. He was also lecturer in the nursing schools of Providence, Georgetown, Columbia and Sibley Hospitals.

Dr. Kelley was a Life member of the District Medical Society, having been on the membership rolls since 1891. He was a member of the American Medical Association, a Fellow of the American College of Surgeons, member and Past President of the Washington Obstetrical and Gynecological Society and the Clinico-Pathological Society, and a member of the Washington Medical and Surgical Society.

At the time of his death he was the oldest living member of the Board of Directors of the National Metropolitan Bank, having served on the Board since 1920. He was a former member of the Board of Directors of the Bank of Rockville, where he had served from 1925 to 1940.

He was a charter member of Temple Noyes Masonic Lodge, one of the last three surviving members. He was a member of the Georgetown Presbyterian Church.

Surviving are two sons, Ogden Kelley, of the home address, and Thomas C. Kelley, of Pleasant Hills Farms, the Kelley family estate. A daughter, Miss Edna Kelley, of the Washington address, also survives. His wife, Mrs. Virginia Ogden Kelley, whom he married in 1896, died in 1939.

THOMAS J. ROSSITER, M.D.
(1872–1953)

Dr. Thomas J. Rossiter, Life member of the Medical Society of the District of Columbia, and general practitioner in Washington for more than 50 years, died, September 2, 1953, at his home, 820 D Street, S. E. He maintained his offices in his home.

Dr. Rossiter was born, October 25, 1872, at Longgreen in Baltimore County, Maryland, the son of Thomas J. Rossiter, Sr., and Elizabeth Dell Rossiter. He attended public school and high school in Baltimore County. He graduated in medicine from National University Medical School in 1902 and interned at Casualty Hospital. He opened his office in the District of Columbia at 125 D Street, S. E., the same year.

Dr. Rossiter became a member of the Medical Association of the District of Columbia in 1904, and a Life member of the District Medical Society in 1945.

He never married. He is survived by a brother, George Rossiter, of Washington and New York.

JULIAN MENZO HOWE, M.D.
(1895–1953)

Dr. Julian M. Howe, general practitioner and surgeon in Washington for more than 30 years, died, August 3, 1953, in Miami, Florida, where he had been living for the past year. He had been ill for several months.

Dr. Howe was born in Worcester, New York, September 17, 1895, the son of John and Jennie Crippen Howe. He came to Washington to study at the Washington Missionary College in Takoma Park, Md. After graduating in medicine from George Washington University School of Medicine in 1921, he served internships at Gallinger Municipal and Garfield Memorial Hospitals and a residency at Washington Sanitarium and Hospital. He began his practice in the District of Columbia in 1921 but interrupted it to take postgraduate work in surgery abroad at the University of Vienna.

For many years Dr. Howe had offices at 1309 Rhode Island Avenue, N.W., but more recently his offices were located at 901 20th Street, N.W., in a building which he owned.

He was elected to Active membership in the Medical Society of the District of Columbia in 1922 and continued his membership until his death. He was also a member of the American Medical Association and the Southern Medical Association. A veteran of World War I, he was a member of the American Legion.

Surviving are his wife, Mrs. Rebecca Sevier Howe, of Miami, and two sons, John W. Howe, of Miami, and Carl E. Howe, of Olney, Md.

JOHN W. CROWE, M.D.

(1867–1953)

Dr. John W. Crowe, retired medical officer of the U.S. Bureau of Engraving and Printing, died, July 17, 1953, at the Kensington Gardens Sanitarium, where he had been a patient since February.

Dr. Crowe, a native of New York City, was born, November 12, 1867. He came to Washington as a young man and graduated from Georgetown University School of Medicine in 1897. He began the general practice of medicine in the District of Columbia the same year; he continued his practice at his office and home, 1325 Park Road, N.W., until three years ago. Dr. Crowe was appointed medical officer of the Bureau of Engraving in 1920, retiring from that position in 1937.

For many years Dr. Crowe was a member of the American Medical Association; he was an Active member of the Medical Society of the District of Columbia from 1925 to 1952.

Surviving is a son, Joseph N. Crowe, of 4831 36th Street, N.W

JOSEPH JAMES KAVENEY, M.D.

(1880–1953)

Dr. Joseph J. Kaveney, retired Naval surgeon, died, August 25, 1953, in San Diego, California, where he had been visiting relatives and friends. He had served as aide to two Surgeons General of the Navy, during the late 1930's and through World War II.

Dr. Kaveney was born in Haverhill, Massachusetts, August 15, 1880, the son of Michael H. and Margaret Higgins Kaveney. He was educated in the public schools and St. James High School of Haverhill, and attended St. Dunstan's College at Charlettown, Canada. He came to Washington to attend Georgetown University School of Medicine and received his medical degree from Georgetown in 1904. The following year he interned at the U. S. Naval Hospital, and in 1906 he took postgraduate training at New York Lying-in Hospital. For a few years he was engaged in private practice in the District of Columbia.

Dr. Kaveney served the United States Navy during two World Wars. He was commissioned Lieutenant (junior grade) in the Naval Medical Corps in 1913. During World War I he had duty at the Navy Yard in Brooklyn and the Navy Yard (now the Naval Gun Factory) in Washington. After the War was over, he went to sea with the Fleet, serving on the Flagships *U.S.S. New Mexico* and *U.S.S. California*, from 1919 to 1922. He was stationed at the Naval Hospital in Portsmouth, Virginia, from 1922 to 1924. Assigned to China in 1924, he was medical officer aboard the *U.S.S. Palos*, which was part of the Yangtze River Patrol. Two years later he returned to the United States and was stationed at the Naval Academy until 1929. He returned to sea duty on the *U.S.S. Niagara*, from 1929 to 1931.

Captain Kaveney was aide and administrative assistant to Admiral P. S. Rossiter, Surgeon General of the Navy, from 1933 to 1938, and served in the same capacity to Admiral Ross T. McIntire, Surgeon General of the Navy, from 1938 to 1945. At that time he was also director of Naval affairs for the American Red Cross.

Just before his retirement in February, 1946, he was Executive Officer of the Biltmore Hotel Naval Hospital in Palm Beach, Florida.

Dr. and Mrs. Kaveney, who survives him, have lived at 1332 Massachusetts Avenue, N. W., since his retirement.

Dr. Kaveney was a member of the American Medical Association and an Associate member of the Medical Society of the District of Columbia since 1948. For a few years following 1907 he was a member of the Medical Association of the District of Columbia. He belonged to the Military Order of the Carabao and the Army-Navy Club.

WALTER ARTHUR RATH, D.D.S.
(1893–1953)

Dr. Walter A. Rath, Associate member of the District Medical Society, died, August 23, 1953. He was a practicing dentist in Washington since 1924, with offices in the Columbia Medical Building.

Dr. Rath was born in Brooklyn, New York, August 11, 1893, and was educated in public and private schools there. He studied at the University of Pennsylvania until he enlisted in the Army during World War I. He received his degree in dental surgery from New York University in 1920.

Dr. Rath served at the Children's Hospital Dental Clinic from 1930 to 1947, first as intern, then as Chief of the Clinic, and later as consultant. He had courtesy privileges in oral surgery at Episcopal Eye, Ear and Throat Hospital and at Garfield Memorial Hospital.

He was President of the D. C. Board of Dental Examiners in 1952–53. He was General Chairman of the District Dental Society's Postgraduate Clinic in 1944.

Dr. Rath belonged to many professional organizations, among them the American Dental Association, the District of Columbia Dental Society, the Edwin T. Darby (University of Pennsylvania) Honorary Dental Society, the Association of Dental Editors, and the American Society of Dentistry for Children. He had been an Associate member of the District Medical Society since 1940. He was a Fellow of both the American College of Dentists and the International College of Dentists. He was art editor for the *Journal of the D. C. Dental Society*.

His wife, Mrs. Ruth D. Rath, who resides at their home, 4400 Brandywine Street, N. W., survives him together with one son, Kent Rath.

Cardiac Arrest—Ware

(Continued from page 530)

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Dissociative Reactions—Laughlin

(Continued from page 551)

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MEDICAL SOCIETIES WITH LIMITED MEMBERSHIP

WASHINGTON, D.C.

1953–1954

SOCIETY	PRESIDENT	SECRETARY	NO. MEETINGS PER YEAR	DATE OF MEETINGS	PLACE OF MEETINGS
American Academy of General Practice, D. C. Chapter	L. A. Klein	S. Diener	4	On Call	MSDC Building
American College of Cardiology, D. C. Chapter	J. B. Glenn	I. Brotman	4	Oct., Dec., Feb., Apr.	Hotel Statler
Baltimore-Washington Dermatological	J. Q. Gant	J. L. Derzavis	8	3rd Thursday	Alternating Cities
Clinical Club of Washington	D. C. Crain	E. C. Wilson, Jr.	8	1st Tuesday	Army-Navy Club
Clinical Society of Diabetes Association	J. E. Cassidy	S. D. Loube	3	On Call	MSDC Building
Clinico-Pathological	T. Bradley	W. M. Willett	8	2nd Tuesday	Homes
Diabetes Association	L. J. Thomas	L. K. Alpert		On Call	MSDC Building
Georgetown Clinical	G. H. McAteer	F. L. Zinzi	8	3rd Tuesday	Hotel 2400
Georgetown University Medical Alumni Club	M. J. McInerney	W. B. Walsh	2	On Call	
George Washington University	L. H. Snyder	R. H. Fischer	8	3rd Wednesday	MSDC Building
Harvard Medical Alumni	S. Ross	F. G. MacMurray	3	On Call	
Hippocrates-Galen	J. W. Latimer, Jr.	J. B. Harrell	5	1st Thursday, Nov., Jan., Feb., Mar., Apr.	Homes
International Medical Club	F. A. J. Geier	P. S. Constantinople	—	On Call	Mayflower Hotel
Jacobi	I. Hantman	W. Lewis	8	3rd Monday	Washington Hotel
Kober	A. A. J. Den	J. R. Ewan	5	3rd Monday	Army-Navy Club
Louis Mackall	P. Kiernan	H. S. Sabin	7	3rd Thursday	Kennedy-Warren
Medical Arts	H. D. Ecker	E. E. Ferguson	8	2nd Thursday	Kennedy-Warren
Osler	T. Bradley	F. D. Chapman	8	4th Monday	Homes
Pan American (D. C. Branch)	W. L. Dunn	D. F. Lynch	4	On Call	Shoreham Hotel
Physician-Veterans of World War II	F. S. Ashburn	E. A. Gould	1	December 7	
Providence Hospital Doctors Alumni Association	L. J. Goffredi	J. E. Paquin	10	1st Sunday	Providence Hospital
Rheumatism	C. P. Ryland	A. R. Crain	3	Nov., Feb., June	Old New Orleans Restaurant
St. Elizabeths Hospital	W. L. Granatir	D. Harris	3	On Call	St. Elizabeths Hospital
Washington Academy of Medicine	W. A. Bloedorn	E. C. Albritton	3	Fall, Winter, Spring	Roger-Smith Hotel
Washington Academy of Surgery	G. K. Nutting	D. C. Richtmeyer	4	2nd Monday, Oct., Dec., Feb., May	Kennedy-Warren
Washington Gynecological	S. M. Dodek	J. B. Sheffery	5	Oct. 24, Dec. 5, Jan. 20, Mar. 27, May 5	Willard Hotel

NOTE: Most of these societies begin their meetings in October and continue through April or May.

MEDICAL SOCIETIES WITH LIMITED MEMBERSHIP—*Continued*

SOCIETY	PRESIDENT	SECRETARY	NO. MEETINGS PER YEAR	DATE OF MEETINGS	PLACE OF MEETINGS
Washington Heart Association, Scientific Council	C. B. Ethridge	H. H. Hussey	4	On Call	
Washington Medical and Surgical	J. M. Orem	K. C. Corley	6	4th Monday, Oct.–Apr., except Dec.	Hotel 2400
Washington Orthopedic Club	L. T. Peterson	H. L. Feffer	8	1st Monday	George Washington University Hospital
Washington Psychiatric	H. P. Laughlin	S. J. Rosenberg	8	2nd Friday	MSDC Building
Washington Psychoanalytic	E. E. Hadley	S. L. Olinick	8	2nd Saturday	MSDC Building
Washington Society of Pathologists	K. L. McCoy	J. S. Howe	8	Oct. 8, Nov. 6, Dec. 7, Jan. 5, Feb. 3, Mar. 4, Apr. 2, May (?)	Army Medical Service Graduate School, Walter Reed
Washington Urological	W. D. Jarman	G. R. Gable	6		Doctors Hospital
Women's Medical	C. L. Fusfeld	S. S. Martin	8	1st Tuesday	MSDC Building

SECTIONS OF THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA

1953–1954

SECTION	CHAIRMAN	SECRETARY	NO. MEETINGS PER YEAR	DATE OF MEETINGS	PLACE OF MEETINGS
Anesthesiology	J. J. Andrina	C. S. Coakley	4	Oct. 1, Nov. 9, Jan. 15, Feb. 26	MSDC Building
Dermatology and Syphilology	R. Stolar	N. M. Kanof	2	On Call	MSDC Building
Gastroenterology	H. A. Monat	W. T. Gibb, Jr.	4	On Call	Homes
General Practice	I. P. Frohman	W. R. Perkins, Jr.	4	4th Tuesday, Oct., Jan., Mar., May	MSDC Building
Neurology and Psychiatry	J. P. Murphy	H. H. Ammerman	8	1st Thursday	MSDC Building
Ophthalmology	J. S. Dryden	W. D. Foote	4	2nd Tuesday, Nov., Feb., Apr., May	Kennedy-Warren
Otolaryngology	J. Louzan	J. L. Levine	5	3rd Wednesday, Sept., Nov., Jan., Mar., May	Burlington Hotel
Pathology and Laboratory Medicine	O. B. Hunter, Jr.	E. C. McGarry	7	2nd Friday	Homes
Pediatrics	G. Maksim	J. E. Cassidy	2	On Call	
Radiology	A. A. J. Den	A. C. Wyman	4	3rd Wednesday, Oct., Jan., Mar., May	MSDC Building

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THE CONVERSION REACTIONS*

HENRY P. LAUGHLIN, M.D.†

Assistant Clinical Professor of Psychiatry, George Washington University School of Medicine

IN THE study of the psychoneuroses the conversion reactions command an important place. Historically, conversion hysteria was the first to receive wide recognition and scientific study. When conversion symptoms appear they include dramatic and striking instances of major functional and sensory impairment. Working out the dynamics and securing resolution, both of hysterical character traits and of symptoms, remains a real challenge. Although the physically handicapping type of major symptoms are seen more rarely, instances are still included in the experience of most physicians.

Thus far in the consideration of the psychoneuroses the nature and origins of anxiety, the anxiety reactions, which result from direct expression of the tension and anxiety of emotional conflict, and the disassociative reactions, which are sometimes seen as an almost explosive disrupting personality response to overwhelming anxiety, have been discussed. We are now ready to direct attention toward other types of neurosis in which the symptoms represent in deeper fashion a defense against anxiety. Among these the conversion reactions will be presented, first because of their historical position in the development of the scientific study of psychodynamics, and, second, because an understanding of the psychopathologic process will help us understand the dynamics of other types of neuroses.

Under the heading of conversion reactions will be included those emotional illnesses in which the anxiety of emotional conflict is defended against by the onset of symptoms in which function is impaired, usually of those parts of the body that are mainly under voluntary control. These symptoms, as we shall see, represent a symbolic attempt at resolution of the underlying (and unconscious) conflict. The avoidance, or warding off, of consciously experienced anxiety in a hidden and sometimes inaccessible psychologic process is the primary gain of the illness. In gross symptom-formation this purpose is served by the symptom usually representing symbolically either a denial of the forbidden impulse or a substitutive gratification of the prohibited wish. Certain symptoms may also represent a combination of symbolic expressions or a compromise; for example, the tics represent a compromise between the symbolic inhibition and the symbolic gratification of the unconscious instinctual drive.

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* This is the third of a series planned to cover the psychoneuroses. The next article, entitled "Depression: Some Dynamic and Clinical Features of Depressive Character Defenses, Psychoneurotic Depression and Suicide," will appear in the December issue of the MEDICAL ANNALS.

† In the private practice of psychiatry and psychoanalysis, Chevy Chase, Maryland; Consultant in Psychiatry to Walter Reed Army Medical Center and the National Institute of Mental Health.

The resulting disability also serves more immediate ends, i.e., (1) gratification of needs for attention, love, affection, dependency, (2) escape from military service or an intolerable job or family situation, and (3) compensation. This is referred to as secondary gain.

Conversion hysteria is the neurosis in which such major symptoms are present as paralysis, anesthesia, and dyskinesia. More specifically, there may be minor or major areas of paresis (monoplegia, hemiplegia, weakness, aphonia), anesthesia (surface sensory loss of various areas, special sensory loss, blindness, deafness, etc.) or movement and coördination disturbances (hysterical convulsions, tremors, tics, gait disturbances).

It is also important to recognize the similar position of hysterical character traits to these hysterical symptoms. These are developed likewise as personality defenses against anxiety, and from a therapeutic standpoint one seeks similarly to gain an understanding of the internal needs responsible for their development.

The concept of "conversion" as a term to describe the conversion of anxiety into symptoms is a very useful one. This is attested by its wide adoption and current usage. Sometimes used in discussing the somatization reactions, in this discussion the term will be limited to hysterical symptom-formation.

Although the concept of conversion is relatively new and the adoption and application of the term itself has widened, the reverse is true of hysteria. This term is indeed ancient in origin. It derives from the Greek word for uterus, since in centuries past certain symptoms were erroneously ascribed to the migration of that organ. At the close of the last century hysteria was used descriptively and diagnostically for a variety of emotional conditions. Indeed, the literature of fifty years ago abounds with case material included under the general label of hysteria which today would be diagnosed under various neurotic labels and even schizophrenia. Since then the use of this term has undergone evolution and refinement, resulting in a constant narrowing of application. Currently the use of the term hysteria is properly reserved to the major conversion reactions involving paresis, anesthesia, and dyskinesia, and to describe a characteristic type of personality structure. There is even a tendency current in some quarters to entirely discard all diagnostic use of the term.

The diagnosis of conversion reaction or conversion hysteria* is to be made when the principal presenting neurotic features are based upon a conversion type of reaction. These are to be differentiated for diagnostic purposes and classification from the psychophysiologic autonomic and visceral disorders. Use of the term "hysterical" otherwise is indicated to help describe personality features which are characteristic of the hysterical personality.

THE HYSTERICAL PERSONALITY

The hysterical personality consists of a constellation of at least several of the characteristic personality traits, which may be present in varying strength. There may be little or no actual symptom-formation; in such instances the character defenses suffice to ward off anxiety. At other times one may observe a predisposition to later development of actual symptoms as reinforcement to increasingly inadequate character defenses, or independently. Glover[1] regarded the absence of "obvious symptom-formations" as a prerequisite. When symptoms are already present, one can sometimes see underlying and perhaps predisposing personality features.

When present in marked degree these traits can result in the hysteric being a difficult person with whom to get along. On the other hand, although the typical characteristics often in themselves as terms alone imply an adverse judgment or convey an unfavorable moral judgment, the individual may possess a certain appeal and charm or positive attributes which may well counteract the negative aspects. It is even more important for the clinician to avoid judgmental attitudes toward the patient. This can be done by constantly focusing attention instead upon such hypothetical questions as, What purpose does this trait (or symptom) serve? and What is the patient's internal need to develop and desperately cling to a personality trait which is a considerable handicap to him?

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* Terms to be used interchangeably. (American Psychiatric Association: Diagnostic and Statistical Manual, 1952, p. 33.)

Actually the personality picture seen in the hysterical person is not far removed from the lay concept and usage of the term hysteria. The hysterical person is typically immature and tends to be emotionally capricious. In varying degree, having been unable to develop interests beyond the narrow confines of self, he is egocentric. Let us pause for a moment and consider some possible internal needs that might be met by this trait or others.

First let us recall that character traits roughly equate the function of symptoms in attempting to ward off anxiety. The egocentricity actually stems in complex fashion from a felt deprivation of love and affection in early life. The early rage in response to this was repressed from awareness as too dangerous. In other words, the lack of love produces rage and resentment in the infant which is too dangerous and unacceptable (toward the desperately important mother) to recognize. The child's level of ego cannot tolerate much rage or hostility toward a loved one. Repressed, these forbidden feelings threaten to come into awareness.

Egocentricity and other character traits develop in an attempt to procure or force love as a way of then concealing the patient's rage and hostile feelings from himself. It says, in effect, "because I feel unloved by you, I will make you take notice of me and pay attention." It is to be noted that notice and attention are sought sometimes as a substitute when love cannot be secured. Unpleasant attention or even punishment is preferable at times by the child over being ignored, and often appears to be sought in determined fashion. If the egocentricity and other traits are successful in eliciting attention to a satisfactory degree, the anxiety resulting from threatened awareness of the murderous rage can be prevented, as repression of the latter is maintained.

As might be expected from such needs, the hysterical person seeks attention and may make excessive demands for it from friends and family. Closely related to this is a rather frequent "flair for the dramatic." This results in the emotional histrionics and the small bits of dramatic performance which may be resorted to in attempting to satisfy dependency needs or to gain various ends in interpersonal situations.

Other major characteristics of the hysterical person are the presence of strong dependency needs and susceptibility to suggestion. In some ways the behavior and reactions of the person with strong hysterical personality traits may be compared to those of the spoiled child. Similar adjectives may be heard such as demanding, inconsiderate, vain, selfish, impulsive and juvenile. There is apt to be little ability to consider the wishes of others. The impulsiveness is the result of an underdeveloped ability to anticipate the future consequences of actions or, to state this another way, the childish "I want what I want when I want it." As a consequence, the person can assume little responsibility or may shun it.

There is generally little consideration for the wishes of others in the urgent demands and needs of these people for the attention, affection, and sympathy of which they feel deprived. Whereas many emotionally sick people are overinhibited, the hysteric lacks inhibitions in a way that can seriously handicap his ability to fit in socially. Not infrequently the hysteric is shy, timorous, and fearful, although this trait may not be outwardly apparent. Relationships with people tend to be on the shallow and superficial side as the capacity has not properly developed for forming mature relationships. Let us pause at this juncture to consider a patient whose personality traits upon beginning treatment were mainly hysterical.

Case 1. A 32-year-old married housewife sought intensive treatment for increasing difficulty in getting along with other people and for recent panic attacks. During treatment character traits of the hysterical personality pattern became apparent. Her demanding, childish, self-centered behavior came to be clearly recognized during analysis as an effort to force love from a critical, cold, vindictive, perfectionistic mother toward whom the patient could not bear to recognize her intense rage over the deprivation she felt. The panics took place when the character traits threatened to break down in their effectiveness at securing some sort of satisfaction of dependency needs from mother and others.

In this case the character traits attempt to present a defense against awareness of prohibited feeling of rage toward authority figures (mother), which awareness would arouse great anxiety. They were quite sufficient to account for the great difficulties in interpersonal situations. The desperate tenacity with which such traits (character defenses) are usually held on to is indicated in some measure by the 3 years of treatment required prior to successful resolution of the underlying conflicts and the development of a reasonably mature personality adjustment.

As part of the desperate need to force attention, the hysteric may take drastic and dramatic steps. In the following example the patient made a suicidal attempt.[2]

Case 2. A 26-year-old unmarried nurse with typical hysterical character traits, who was being treated on an inpatient status, had great needs for attention and affection. Part of this was directed toward the securing of special privileges from the staff, some of whom responded with hostility. She was alternately coquettish, pouting, seductive, sullen, flattering and demanding, having developed great resources in response to her desperate strivings for the love and warmth of which she felt deprived. As a culmination, when these traits failed to secure the needed attention, she obtained and took a quantity of Seconal.

This was apparently not a serious attempt (from the standpoint of life), since the quantity was insufficient to be very dangerous. When discovered, she had seemingly prepared for this moment and had arranged her long blonde hair dramatically over the pillow. Make-up was skillfully applied and she was attired in her best robe and gown. This unhappy and desperate girl was driven by her dependency needs to behave increasingly frantically, but in a way unfortunately designed to often defeat her efforts to obtain the love and acceptance which she so desperately needed.

As might be expected, the hysteric handles hostility and aggression poorly. He may display petulance and annoyance readily. Angry outbursts may occur when his demands are not met. The anger or pique usually dissipates readily, however. This emotional lability may result in a succession of moods with quick transition, sometimes in histrionic fashion, from tears to laughter and back. He may handle his aggression in passive ways, apparent surface agreement being followed by resistance, uncoöperativeness, and subtle ways of defeating the other person.

The following example illustrates how uncoöperative a patient can be, as he desperately holds on to a defensive symptom. This patient defensively rejected competent medical advice, despite clearly explained disastrous and permanent consequences to himself.

Case 3. A 32-year-old construction worker was under treatment for a hysterical paralysis of 6 months' duration. This had resulted in his being unable to work. While his livelihood was imperiled, as an element of the secondary gain, he was, however, receiving compensation and through his disability had escaped from an extremely difficult work situation. While, upon questioning, he would superficially state his interest in getting back to the job, it was apparent that he had little real drive in this direction. Psychotherapeutic efforts were effectively handicapped by his complete passivity, plus a face-saving need to insist (against the results of competent medical studies in several specialty fields) upon a physical basis for the paralysis. It was not possible, therefore, to more than guess at the possible primary gains in the dynamics of his illness.

In the meantime, although he was repeatedly professionally advised to exercise the paretic limb, these necessary exercises were not done. As a result, effects of atrophy of disuse were clearly present and progressing both visibly and as shown by X-ray films. Earnest efforts were made by specialists in various fields to explain the urgent reasons for the patient taking some responsibility in helping to prevent ankylosis. All attempts to help him were quietly sabotaged.

When physiotherapy was arranged he was repeatedly late for appointments, missed many completely, and was regarded as a most uncoöperative patient.* The self-defeating and destructive results of his behavior are clear. One can also see the vicious cycle which can be established. Deprivation of love leads to character traits and symptoms which in turn may generate antagonism and hostility in place of the acceptance and love sought. This response repeats the earlier pattern. Rejection leads to demands, which lead to rejection, which leads to demands.

The hysterical personality may have an outward mask of friendliness to cover underlying irritability and hostility. In other instances there is sometimes seen a deceptive outward submission and passivity. In the above case, the patient would verbally agree with the doctor's advice. His apparent agreement was at times deceptive to some of the physicians in the light of subsequent performance. The latter was in turn dictated by desperate internal needs to maintain the defensive symptom at all costs.

Suggestibility is an important aspect of the person with a hysterical personality structure, and likewise in the determination of a diathesis for conversion reaction. Also, the hysteric usually has the ability to dissociate and is likely to be a good candidate for hypnosis. It is sometimes possible to remove and even to bring on symptoms by strong suggestion alone. Indeed, an appreciation of this factor of response to suggestion in the hysterical character is a help in understanding some of the dramatic, miraculous, and magical cures, particularly of earlier eras, as well as the response of certain obscure conditions to fancy machines, faith healing, or nostrums. Suggestion is not only effective in the waking state but may be enhanced by drugs and in hypnosis.

Finally, the hysterical person is likely to be on the open, trusting side and is sometimes rather naïve. As these characteristics are presented it must be borne in mind that they are present in varying degrees and combinations. The ones mentioned are those most frequently associated with the hysterical type of personality make-up. It is not possible to draw absolute, hard and fast lines in establishing criteria for types of personality structure, although certain characteristics in combination can often establish the presence of a given type rather definitely.

In conclusion, the hysterical person is characterized as being an immature, suggestible, emotionally labile, and egocentric individual who has strong dependency needs and a flair for the dramatic. As a reflection of his internal needs, he seeks attention and is impulsive and demanding. He is likely to be naïve and to have the ability to dissociate. Aggression and hostility may be handled poorly and the capacity for mature relationships is underdeveloped.

The ability to make a satisfactory sexual adjustment is more or less inadequate. In the past the sexual conflicts were the important consideration in hysteria. This is not surprising, since the sexual act is an interpersonal relation of sufficient emotional intensity for vicissitudes here to evoke hysterical symptom-formation or the intensification of hysterical character traits. Then, also, the sexual drive, together with aggressive impulses, are the urgent instinctual needs most likely to enter into emotional conflict.

Finally, from a dynamic standpoint, we have seen the close relation of the hysterical trait to hostility and how it serves as a defense against the recognition of resulting anxiety. Thus, the person may be egocentric, demanding, and attention-seeking because he can't tolerate the anxiety of recognizing the rage toward the loved one, which in turn is in response to the deprivation of love and affection which he has experienced. If he devotes all his energy to getting these wants fulfilled, he cannot be aware of the forbidden impulses. If his traits do not result in satisfying his needs, they may be reenforced by intensification of the character traits or perhaps by symptom-formation.

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* There are, of course, several deeper layers of meaning here. For example, his behavior says in effect, "I can't allow myself to get well. Despite my severe losses from the illness, the psychologic purposes subserved by the symptoms are much more desperately important to me and must be preserved at all costs." Unfortunately, even partial appreciation of this was understandably insufficient to prevent frustration and discouragement sooner or later on the part of most of the physicians who were connected with this case.

CONVERSION HYSTERIA

Conversion hysteria might be regarded as a special psychologic pattern with formation of defensive symptoms designed to maintain repression, i.e., to keep forbidden impulses from awareness, thereby avoiding anxiety. What contributes to the development of a hysterical diathesis so that the sufficient initiating stress will be followed by conversion symptoms? We don't know the entire answer. We do know that cold and rejecting parents can contribute by not providing necessary affection, warmth and love. Other parents, for needs of their own, may have to keep the child dependent and clinging in a way that is responsible for an inability to renounce infantile needs. The resulting insecurity may result in character traits which perpetuate it indefinitely. It is also true that children who have hysterical parents are far more likely to develop these traits themselves through all the complex mechanisms of idealization, identification, incorporation, etc., involved in personality formation. Literally any development which hampers maturation may favor establishment of the conversion diathesis. Inadequate or poorly adjusted home and school environments and disturbed inter-family relationships can be predisposing factors.

Conversion hysteria is one of the major categories of the psychoneuroses for purposes of classification and diagnosis. In its distinctive psychopathology anxiety is "converted" into sensory and motor disturbances usually affecting those parts of the body mainly under voluntary control. The disability may be variable in extent and degree. In the classical case it is likely to be striking and major.

In many cases of emotional illness there are elements of several types of neurotic patterns. As we might expect, one may see cases of neuroses in which there are minor conversion symptoms or certain hysterical features in which the diagnosis quite properly is of another type of neurosis. In like fashion, cases of conversion hysteria may also include elements of one or another of the other types of neuroses.

INCIDENCE

Prior to the beginning of this century the sensory and motor disturbances and dyskinesias of hysterical origin were fairly common. The more dramatic forms with major paralysis, blindness, aphonia, and convulsions were rather familiar to physicians. It is not surprising that these cases with their major disability, dramatic features and relative frequency attracted the attention of the early physicians who became interested in psychiatry. Study of these cases was associated with much of the pioneering work in dynamics and psychopathology. During the first World War the incidence of conversion hysteria was high, with all types of disability being seen frequently. In line with an early belief that the shock of exposure to shell-fire accounted for the nervous symptoms, many cases of conversion reaction, as well as other types of emotional illness, were called "shell shock." To the general public at the time this label helped to allay the possible stigma of an emotional disorder of "internal" origin as opposed to the "external" and even patriotically associated origin suggested by the name "shell shock."

In contrast, during World War II typical conversion reactions were relatively rare. Although the general incidence of somatic symptoms and physiologic disturbances in response to stress showed little change in incidence, there was a definite change in the quality of response. While conversion reactions were occasionally seen, much more frequent were the disturbances of the cardiovascular system (tachycardia, irregularities), the gastrointestinal system (peptic ulcers and ulcer symptom, digestive disturbances, irritable colon), and the general neuromuscular symptoms (headaches, backaches, vertigo).

How can we account for these changes in the type of physical and physiologic responses to stress? Why has the incidence of the major symptoms of conversion hysteria decreased to the point where they are today rarely seen in the civilian practice of psychiatry? My theory in attempting to explain this is based upon what appears to be an inverse relationship between the incidence of conversion hysteria and the gradual rise in level of scientific knowledge and education and the increase in sophistication of the general population. As part of this theory, it is culturally (socially and professionally) more acceptable to have a rapid or irregular heart beat or a G.I. tract difficulty than a non-organic paralysis. The latter on an emotional basis doesn't make sense to people any more, or perhaps one might say it makes too much sense, as the factors of secondary gain become more transparent to the more sophisticated family and friends of today. This is not true of the primary gain, however, and the question of whether recognition of secondary gain factors alone would have a sufficiently suppressive effect might be raised. Nevertheless, I believe that the pressure of decreased social acceptability undoubtedly exerts certain subtle continuing pressures upon the currently "popular" type of psychoneurotic manifestation. If we assume that this theory is to some extent applicable, and presupposing a continued gradual rise of cultural sophistication, it makes an interesting speculation to consider whether the resulting pressures toward social and cultural acceptance on an increasingly sophisticated level will continue to drive somatic and physiologic expressions of emotional conflict into deeper avenues of expression. Currently, few textbooks contain an up-to-date chapter on conversion hysteria.

A low intelligence quotient (60–90) used to be, and still is in some quarters, considered prerequisite for a diagnosis of conversion hysteria. In my experience this is no longer a criterion. The last 4 patients I have seen all had I.Q.'s over 100 (Wechsler-Bellevue: 107, 114, 119, and 109). It remains correct, however, that a lower level of sophistication likely increases the chances of conversion symptom-formation.

PATHOGENESIS

In the conversion reactions the anxiety resulting from conflict with instinctual drives is "converted" into symptoms in organs or parts of the body. In large measure, anxiety is not experienced consciously as we saw in the anxiety reactions, but, instead, a variety of physical or psychic symptoms appear. These symptoms serve as a defense against unconscious instinctual drives which threaten possible emergence into awareness. Either openly or covertly, they are harbingers of the underlying mental conflict. Also, they serve some more obvious or immediate gain to the patient. In other words, in the conversion reactions, the mental conflict is converted into symptoms which attempt in open or concealed fashion to solve the conflict by symbolic gratification of a disguised wish, denial of an instinctual need, or symbolic compromise.

Because of the relative absence of overt anxiety, we may consider the symptoms themselves as substitutions for the anxiety which they prevent. Conversely, sudden removal of the symptoms may result in the appearance of intense anxiety or even psychosis. This is an important consideration when treatment is contemplated.

The personality which is susceptible to the development of conversion reactions is generally characterized by immaturity, egocentricity, suggestibility, and strong dependency needs. There is a close relation between the conversion reactions and the dissociative reactions as presented earlier.[3] Indeed, conversion symptom-formation may be thought of as dissociative in nature. From this standpoint, one or more functions are split off or dissociated. For example, the function of one arm is dissociated and the arm becomes paralyzed. This ability to dissociate a somatic or sensory function is a requisite for the formation of conversion symptoms.

It is important to remember the significance of dependency needs as a motivating force in the pathogenesis of symptoms. Symptoms seen are regressive in character, usually rendering the patient more or less helpless and depriving him of some of his usual skills. He accordingly requires some amount of being taken care of which may progress in extreme cases to a state of nearly complete infantile helplessness and dependence. An instance of this was seen several years ago in the case of a 32-year-old housewife who became so hysterically weak and helpless that her husband literally had to carry her into my office. I lost track of this case, unfortunately, as a result of her husband's military orders very shortly taking them to another part of the country. Primary and secondary gains have been discussed. Dependency needs are apparent in both. Finally, the symptom itself has definite symbolic meaning which can be determined in successful psychotherapeutic investigation as illustrated in cases 1, 5, 9, and in the following case.

Case 4.[4] Following severe situational and personal emotional stress, a 31-year-old major in military service developed a peculiar and rather dramatic type of "drum-major" gait in which, when walking, he could not bend his knees. Needless to say, this interfered with his physical activity and military life, and resulted in his being the object of considerable unpleasant comment by his colleagues. Despite the disruptive influence on his military career and personal life which the disability caused, the major was not greatly concerned about the interference with living which the symptom produced. He was certain that there was "something wrong" with his muscles or ligaments.

To his seeming disappointment at that time, competent orthopedic consultants ruled out organic pathology. During intensive study on a deep psychologic level, however, it was learned that the peculiar gait represented, on one level, a strong regressive and dependent wish to have a life similar to that of a boyhood companion who had contracted polio and developed a somewhat similar gait in early life. The symptom attempted to provide substitute gratification. This friend had received a great deal of love, attention, warmth, and affection from his parents which the major had never received but always envied. Furthermore, the major had become mortally afraid of future combat experience. He could not, however, tolerate cowardice in himself. Herein the symptom also solved an otherwise insoluble and more immediate conflict. The symptom served the secondary gain function of removing him from future combat, and, because he had an "illness" and therefore could not fight, it preserved his self-esteem.

In cases of conversion hysteria, certain features in common with or similar to those associated with schizophrenia can be noted. Undoubtedly the pathologic process in the two conditions is related and in certain cases appears to overlap. Occasionally, the differentiation of the hysterical character structure from that of the early schizophrenic may present problems. Diagnosis may require observation and study, sometimes becoming clearer during a period of psychotherapeutic work.

CLINICAL FEATURES

The possible symptoms of conversion are legion. Any function may be interfered with or lost. The variety of possible symptoms is only limited by the variety and combinations of unconscious needs. Actually, the symptom is often a last ditch effort to ward off anxiety and as such is indicative of the desperate internal psychologic needs of the patient.

It is not surprising that he often seeks to explain his disability on a physical basis, for a number of reasons. First, this represents a kind of after-the-fact attempt to explain something which he does not consciously understand. Second, and more important, he often has a strong need to interpret his symptoms on a physical basis as a more socially acceptable and face-saving etiology. Finally, this serves also to protect and maintain the symptom, removal of which would expose him to the feared conscious anxiety (against which the symptom constitutes a defense). If one can grasp the terribly urgent need to deny or secure symbolically substitutive gratification, one can then have an appreciation of why a symptom is often held on to like grim death despite all the sacrifices which can ensue or the destructive effects of the handicap.

In similar fashion the patient may seek to interpret his disability as being the result of an organic illness. In these instances he is likewise often quite resistive to the idea and resentful at the suggestion that his complaints are emotionally determined. In contrast, sometimes the patient with critical organic illness will welcome the possibility of an emotional basis. This reaction constitutes in effect a secondary type of defense in which the symptoms, a defense in themselves, are in turn defended.

The following case illustrates how the maintenance of repression becomes practically a matter of life and death to the patient. The murderous impulses of the mother toward her child are so totally unacceptable to her ego that she would almost rather die than admit them to conscious awareness. It is far more acceptable to lose the function of her right arm than to murder the child, a result which she fears would ensue.

Case 5.* A 26-year-old married mother sought treatment because of a tremendous dragging weakness of her right arm with resultant inability to do her housework or care for her 8-month-old daughter. She also reported being so anxious when in the kitchen that she could not remain there. Her analyst gradually worked out the picture of an immature mother so deprived of love and affection herself that the needs of her child in this direction became an intolerable burden to her. This resulted in rejecting demeanor and attitudes toward the child which were communicated to her intuitively, empathically, and directly.

The response of the child in turn was to become restless, tense, and anxious and to develop poor sleeping habits and digestive upsets. All of this resulted in an added drain and increased resentment and hostility on the part of the mother toward her child, setting up a vicious circle. The weak arm developed as a final safeguard to awareness of her overwhelming rage. As a result a nurse was hired for the child which helped her avoid the child (and her murderous feelings). This arrangement also helped satisfy dependency needs on the part of the mother, who was unable to function on a more mature level because of her own early deprivations of love and affection.

Thus, the mother is hostile to the child because she herself never got any real warmth. Her own great need for affection makes it less possible for her to tolerate demands on her by another person. The anxiety about the kitchen was found to relate to kitchen knives (potential murder weapons) which were kept there. One cannot easily wield a knife with a paralyzed arm.

From this case one can perhaps appreciate why a disabling symptom is "acceptable," and why it is often bitterly defended against therapeutic study and intervention despite major interference with living. Indeed, we can better see the desperate need to hold onto it. The sacrifice of the function of an arm is far more acceptable to the mother than the murder of her child, which is the underlying, unconscious fear. Although there is not space here to consider the complex relationship of the patient to her own mother, one can clearly see how she inadvertently, but most certainly, would have perpetuated a pattern of serious emotional illness in her own daughter.

Janet, an early (circa 1890) French student of hysteria, first observed and described a classic clinical feature of conversion hysteria which he aptly named *la belle indifférence*, the "beautiful," "grand," or striking indifference of the hysteric to his symptoms, which often resulted in major incapacity to him. This relative unconcern over what is often serious disability is due to the fact that the symptom-formation in hysteria represents the unconscious neurotic solution of a conflict. Since the conflict serves a useful purpose unconsciously, the patient cannot take the same serious view of his disability as would another patient whose symptoms did not subserve such desperately important primary needs (solution represented symbolically) and such nearly as important secondary needs (solution through interference, disability and loss of function).

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* Contributed by Dr. Daniel S. Jaffe. At this juncture I should like to acknowledge review of this paper and helpful comments by Dr. Jaffe, suggestions for the manuscript by Dr. Jarl E. Dyrud, and the collaboration of Dr. Marshall deG. Ruffin in preparing the corresponding chapter in "An Outline of Dynamic Psychiatry."

La belle indifférence is a typical finding in conversion hysteria. The more serious the symptom, the more striking is this manifestation. *La belle indifférence* not only is a reflection of the unconscious satisfaction with the attempted solution and resultant prevention of anxiety, however nonconstructive, but also indicates the defensive disinterest in cure or losing the symptom which would result in restored vulnerability to anxiety. Although the patient may call attention to his symptoms and seek treatment for them, they do not appear in themselves to be a real problem and are often presented to the physician with a relative lack of concern out of keeping with their gravity. This is true even when the disability is of such serious import as paralysis or blindness.

This apparent lack of concern over a major disability is typically present in the following case. Although this patient suffered a partially paralyzed leg, a major disability, he showed much more interest and concern over a most minor and transient skin irritation.

Case 6. A 21-year-old soldier completed his basic training without incident. Following this, in view of his superior physical attributes and excellent soldierly bearing, he was assigned to an "honor guard" unit. Upon completion of this tour of duty he was ordered to overseas combat service, but before he could go developed an hysterical partial paralysis of his left leg. This was attributed by the patient to a minor injury. An indulgent orthopedist, likely in response to his complaints and demands, had unwittingly helped along the psychopathologic process in iatrogenic fashion by placing a plaster splint on the leg for 2 weeks. Upon removal of the cast the dysfunction was found to be established. Competent medical evaluation left no doubt as to the hysterical etiology.

Personality study revealed a dependent, immature, egocentric patient, inordinately proud of his physique, who showed great concern over any possible threat of injury thereto. Despite this, and plus the fact that the disability was severe enough to require him to use crutches, was a great impediment, and seriously handicapped present and future physical prospects, he appeared blandly indifferent to the serious implications of his handicap. This was typically *la belle indifférence*. On one occasion he showed much more concern over a very minor skin irritation. He once even requested to see a dermatologist, although he remained indifferent to the point of rudeness to all other medical officers and to their interest in him or efforts to help.

In view of the resistance here, little could be learned in this case of the dynamics of the primary gain except what might be highly speculative. As to the secondary gain features, one might view this disability as an exchange of a definite symptom for an indefinite result of combat. The latter may have been to him subconsciously a greatly dreaded certainty.

La belle indifférence is similar to the flattened affect (diminished emotional expression) of schizophrenia. At times outward similarities may contribute to difficulties in diagnosis.

Earlier, reference was made to the fact that the grossly disabling major symptoms of conversion hysteria are likely to be more frequently observed among persons from a lower social, economic, and educational background. The following case is an example of a rather typical instance in which the I.Q. was also low.

Case 7. A 17-year-old recruit from the mountain country of Tennessee was admitted to a military hospital from basic training during World War II after finding himself suddenly unable to use one leg while standing or walking. Examination disclosed normal function and range of motion while prone or upon sitting. The patient had no understanding of his symptom and could not explain the discrepancy in function when in various positions. Although his inability to walk required him to travel either by wheelchair or with the constant support of another soldier, he did not appear concerned about this otherwise major difficulty.

This soldier's I.Q. of 68 added another formidable barrier to a possibly effective therapeutic approach. Even if his present symptom could be removed, he was indeed a poor risk for military service both from a military and a taxpayer's viewpoint in view of the strong existing potential for further difficulties. In this instance gradual recovery of function followed supportive and suggestive measures, the latter of which early included a careful statement that, in effect, offered a bonus for recovery by saying to him that it was obviously impossible to retain him in service in any capacity since this disability had developed, but that its continued presence indicated he still needed treatment and could only be discharged to home from treatment when he regained the full use of his leg.

Recovery took place gradually with steady increase in function. This is the usual course in recession of this type of symptom. Two of the reasons for this are: (1) Sudden loss of the defensive function might release a sudden flood of anxiety (a reflection of the primary defensive gain); (2) gradual recession is face-saving in relation to the secondary gain features. When removal of symptoms can be secured by the conservative supportive and suggestive measures of psychotherapy, the patient then may be in a better position for intensive treatment.

Cases in military situations unfortunately tend to focus the medical officer's attention (and to some extent, that of medicine generally) on the factors of secondary gain. The overstressing of this function of the hysterical symptom, as opposed to its much more important role as a defense against anxiety from censored instinctual drives, may be very misleading. Seeing this side, to the relative exclusion of the other, also results inevitably in condemning and judgmental attitudes on the part of the physician toward his patient, which make it impossible for him to be very helpful.

Motor symptoms also include such symptoms as globus hystericus, pseudocyesis, aerophagia and headache. In hysterical dyspnea the breathing is rapid and shallow. Hysterical vomiting can be serious to the point of inanition. Camptocormia (bent back) is sometimes seen. In a recent 3-month period I saw a series of as many cases on a local psychiatric service.

The loss of speech on a hysterical basis is still seen and remains the most likely cause to be suspected in any sudden loss of the power to speak, particularly when associated with an emotional scene or where some obvious "secondary gain" is derived. It is at times possible to "trick" a patient out of hysterical symptoms. While dramatic, the "cure" is most superficial; an aphonia may conceivably be replaced by another symptom. Further, by its damaging effect on the self-esteem of a patient, it is hardly apt to promote a continuing good doctor-patient relationship. The following case[4] illustrates the way this was done quite effectively from the standpoint of symptom-removal in one case, but using a technic of no real help from the standpoint of understanding the dynamics.

Case 8. A 45-year-old married woman felt badly treated and neglected by her husband. This had been particularly aggravated following the departure of their 2 grown children from the home. After one in a series of angry scenes with her husband, she suddenly developed aphonia.

Following examination, the physician said to another person present, in a whispered tone, but loud enough to insure the patient's overhearing, "That old gal is an awful fake; of course she could really talk if she wanted to." The angry response of the patient was an indignant vocal denial which both proved the doctor "right" and announced her "cure." Having felt tricked into it, however, her future relations with the doctor left much to be desired.

In cases of aphonia the onset is often sudden, as in the preceding case. As a result, the initiation of therapeutic communication is most difficult. In some cases temporary return of function can safely be secured with intravenous sodium amytal (see cautions later). Its use as an emergency adjunct in treatment is illustrated in the following case. This case is also fascinating because of the unusual and complete dissociation brought out under amytal.

Case 9. A 24-year-old patient was first seen 15 days after the sudden onset of complete aphonia. He exhibited certain mannerisms which, along with other data, suggested possible conflict in a homosexual area. Communication by writing was very unsatisfactory and on the eighteenth day, following careful evaluation of the factors involved, a series of therapeutic interviews were begun and continued under amytal of hypnotic depth until permanent restoration of vocal function several weeks later. In his interviews "I," the voice, talks of Fred, the patient, as of another person. This degree of personality dissociation is most unusual. The following greatly abbreviated verbatim extracts from recordings provide interesting glimpses into the dynamics of the psychopathology in which the homosexual conflict is very important.

"I'm Fred's voice. . . . We were together. . . . Maybe you would call me his conscience. Fred needs somebody; he needs help. . . . I can leave him any time I damn well please.

"I want you to get him over this being queer. I had him under control until a couple of months ago. You talk him out of it. He's read the right books. He'll know what you're talking about. . . . I won't go back to him."

The "voice" went on at one point to relate in detail how and why he left Fred following a night of uncontrolled promiscuous homosexual behavior of every variety which was totally unacceptable. Then later, "It was the stinkingest thing I've ever seen—the 4 of them. . . . I just can't stand the stuff he's been pulling. Sinking lower and lower and lower. I just can't take it any more. . . . He's queer straight through. That's why I left him. . . .

"I can't have him doing this. It's the only way I can teach him a lesson. . . . The only thing wrong with Fred is he's queer as a 9-dollar bill. The way I figure it, doctor, if he can't talk to the other queers, he can't get them. Fred knows I'm not talking, but he doesn't know why. . . . I've told him to behave better a thousand times. He knows I want him to change. I've been pleading with him to change for ages, but he won't change, and as long as he won't change I ain't coming back."

Gradually, however, "he" became reconciled to "coming back."

In these excerpts one can see how the hysterical aphonia attempts to solve a deep-seated conflict over homosexual drives. The aphonia (1) acts to prevent homosexual activity, (2) punishes the bad part (Fred), (3) eliminates or lessens danger, consequences and the important weight of personal and social disapproval, and (4) reënforces repression by the focus of attention on the absence of speech and resulting complications, away from the poorly repressed, abhorrent homosexual strivings which threaten to escape control. The precipitating event was the sexual *smörgåsbord*, although the conflict had been present in serious form for a long time, with attempted handling by conscious suppressive efforts and repression.

Sensory findings may include disturbances of sensation (anesthesia, hypesthesia or hyperesthesia, and paresthesia) and disturbances of special-sense reception (vision, hearing and, very rarely, taste or smell). Of the first group, anesthesias are the most frequently seen. Any area may be affected, but they often do not correspond with anatomic nerve distribution, and the location may shift. The anesthesia may end abruptly in circular fashion around an extremity, producing the characteristic "glove" or "stocking" pattern. On the trunk, also, it may terminate exactly in the mid-line or perhaps extend too far across, findings not supported by the anatomic nerve distribution. The development of surface anesthesia in the highly suggestible patient may be brought on unwittingly by the physician even at the time of examination. A colleague recently told me about treating a case of total surface anesthesia. Hysterical vaginal anesthesia is sometimes seen.

In the second group involving cranial-nerve function one finds some of the most severe manifestations of conversion. It is evident that the most serious and the deepest kind of emotional conflict must underlie the conversion mechanism to which the vital function of vision is sacrificed. Fortunately, complete hysterical blindness is now rare. Hysterical constriction of visual fields (tunnel vision) also occurs. Hearing difficulties, partly or solely on an emotional basis, are relatively frequent. Not all are on a hysterical basis, however, since diminished hearing is apt to have factors of selective inattention and of a less deep-seated emotional blocking in the avoidance of unpleasant and painful data.

The dyskinesias include motion disturbances such as hysterical tics, tremors, posturing, catalepsy, convulsions, and fainting attacks. To establish a hysterical basis one must establish a hysterical diathesis. These manifestations are a defense against awareness of the censored instinctual drive which is aggressive (see case 5), sexual, or both, as exemplified by Kardiner's case where an arm tic represented symbolically murderous impulses and also masturbatory activity.[5] As with other hysterical symptoms, these may express symbolically the disowned wish, as in the coitus-like movements of hysterical convulsions, or serve to deny it, as in some of the paralyses. Usually a tic represents a compromise symbolically between inhibition and gratification of the censored, forbidden wish. The basic conflict is traceable in its roots to the oedipal situation, or beyond it to the oral conflict.

Fainting is a frequent manifestation which is to be differentiated from a variety of medical conditions. Hysterical convulsions may simulate epilepsy, depending sometimes on how much the patient knows about a typical epileptic fit. However, patients are less likely to injure themselves, usually have an audience, and seldom soil themselves.

In conclusion, it would be possible to list a multitude of sensory, motor or psychologic symptoms which are seen alone or in various combinations in hysteria. Since many of these manifestations could in themselves be the basis for prolonged study, the effort here has simply been to outline some of the more important data. Symptoms which appear in conversion hysteria have a symbolic meaning which in some instances may warrant speculation as to meaning. However, the real significance of the symptom can only be worked out by psychotherapeutic investigation. How this may be accomplished is well illustrated in Freud's classic case of Dora.[6] The personality make-up, the setting in which the symptoms occur, the unconscious motives behind the symptoms, and their symbolic significance are the criteria on which the diagnosis of conversion hysteria is based.[4]

TREATMENT

In introduction, the interested physician should review the comments on treatment and the comments about the possible use of hypnosis in therapy in the October issue of the ANNALS.[7] Since the many complex and technical problems arising in the treatment of conversion hysterics proper and in therapy directed toward the hysterical character traits could well occupy several columns, we must content ourselves here with a few remarks. Character analysis of hysterical personality traits can be very gratifying as to results when the patient has a genuine interest in constructive self-study. However, as Sharpe[8] pointed out, the hysteric is generally apt to have "less driving power" in analysis. On the other hand, some therapists feel they don't do well with hysterics, pointing up the value which can often accrue from matching patient and therapist. One prominent psychiatrist told me recently he purposely avoided all contact with hysterics whenever possible, saying, "If I'm going to do therapy, I might as well put in my time with patients I feel I can help."

An understanding of the dynamics involved is vital to securing real resolution of the hysterical difficulties. The physical symptom is a good exchange for anxiety,* entailing much less suffering. In addition to other reasons for maintaining the symptoms, we can understand why resolution is difficult. The symptom also often serves a masochistic purpose of attempted propitiation, to turn away the accustomed rejection and hostility. Sharpe[9] recognized this in commenting that "physical suffering serves the purpose of propitiation. It is offered to turn the anger of the tiger (parents) to pity, to remorse." Thus, when the murderous impulse is to trample, kick, and destroy, the paralyzed leg also reflects propitiatory suffering.

As illustrated, suggestion may be used in treatment, especially preliminary to deeper therapy. Hypnotic suggestion was for years the standard approach. Using this method with the classic case, Anna O., Breuer[10] made some of the initial dynamic discoveries in 1880–81, when he learned the importance of "forgotten" memories of significant emotional events from earlier life to the hysterical symptom. When suggestion is used to remove symptoms only, under hypnosis or amytal there are dangers, as implied earlier. Careful judgment is required if cases are going to be selected for treatment via this approach. It is difficult to draw absolute lines, but, in general, cases of blindness should not be attempted at all and cases of paralysis and aphonia very selectively. Cases of anesthesia are fairly safe. A colleague recently reported to me 6 cases of psychosis which he had seen following attempted routine symptom-removal in a series of hysterics overseas by suggestion under amytal. Five of these cases had originally begun as paralysis and 1 as aphonia in an apparently ill-considered and perhaps inexpert treatment approach.

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* Physical symptoms are in like fashion a welcome relief from other troubling emotional symptoms, as many physicians have observed. Major D. V. Leddy, M.C., U.S.A. recently reported to me the case of a severe obsessive who had his most comfortable time while suffering from a very severe cold and sinusitis. Concentration on the physical symptoms gave relief from obsessive ruminations.

The real problem in treatment of conversion hysteria, as in other emotional ills, is to offer the patient something better than his symptoms. One can appreciate how really tough this can be when a major disability serves powerful unconscious needs.

On the other hand, as an example of occasional rapid response to therapy, Alexander[11] reports a case of conversion hysteria responding to 26 interviews. He explains the efficacy of the treatment as resulting from an unusual transference situation purposely induced by the physician who adopted a role diametrically opposed to the critical, harsh father of the patient.

Treatment of hysteria may be prolonged and difficult. In general, the attempt to secure insight is the goal of therapy, together with a solution of conflicts. In order to secure a more adequate result, the patient must be helped to reach a higher level of maturity through which he might make more satisfactory adjustments in living in the future. He must be induced to renounce some of his strong dependency needs in return for more mature ways of achieving satisfaction. This consists of understanding the internal necessity for the symptom, the choice of more mature goals in living, and the recognition and the solution of his basic conflicts.

In the treatment of hysteria the psychiatrist must possess a great amount of patience and understanding. He must have the ability to keep himself apart from the many efforts of the patient to involve him personally in his characteristically neurotic personal world. The sensitivity of hysterics makes it impossible for a gruff, severe and impatient or hostile therapist to make much progress in therapy. On the other hand, the absence of a reasonable amount of firmness and detachment will also result in the failure of therapeutic efforts.

In general, hysterics respond well to psychotherapy in competent hands, when real interest in constructive introspection can be secured and a genuinely collaborative endeavor is established with the therapist. As a result of successful therapy, changes in personality occur so that the hysteric patient no longer requires the use of his infantile patterns of reaction and behavior in order to solve his problems in life.[4] On the other hand, some hysterics are quite disinterested in treatment and unfortunately remain content to cling obstinately to their illness.

6206 Hillcrest Place
Chevy Chase 15, Md.

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FEVER AS A SYMPTOM

A Pediatric Diagnostic Signpost

CHARLES T. ISAACS, M.D.

Department of Pediatrics, Georgetown
University Hospital, Washington

FEVER is one of the most frequent complaints encountered in pediatric practice. Although the cause of fever is usually easily explained on an infectious basis, it is often a difficult diagnostic problem. This paper will deal with a rather general discussion of the causes of fever.

Definitions:

Fever: An elevation of body temperature due to disease.

Pyrexia: Synonymous with fever.

Habitual pyrexia: Average temperature elevated constantly over the average in a person otherwise healthy.

Hyperpyrexia: Fever 105°F. or higher.

Intermittent (quotidian) fever: Temperature falls to normal and rises again each day.

Remittent fever: Marked variation in temperature level daily, but does not fall to normal.

Continuous or sustained fever: Daily variations are small.

Relapsing fever: Short febrile periods interspersed by one or more days of normal temperature.

Hectic or septic fever: An intermittent fever in which the daily oscillations are very large.

Pel-Ebstein type of fever: Relapsing type of fever but with longer febrile and afebrile periods.

Mechanism of Temperature Regulation

Regulation of body temperature is finely adjusted so that an increase in heat loss is rapidly compensated for by an increase in heat production. The control center for this mechanism is generally attributed to be the hypothalamus, the stimulus for which is believed to be the temperature of the blood perfusing the area. It is also rather well established that the anterior portion of the hypothalamus (parasympathetic area) is the center for heat loss, while the posterior portion (sympathetic area) is concerned with heat production.[1]

Body heat is derived almost exclusively from the combustion of food within the body, the principal source of combustion being the skeletal musculature. Heat loss occurs through radiation, vaporization of water and convection, the degree to which each of these occurs being controlled by the vascular tone of the skin and subcutaneous tissue. A further discussion of these mechanisms is not the purpose of this paper. The production of fever has not been adequately explained, but several theories have been proposed. One hypothesis is that of hemoconcentration, but this is probably more an effect rather than a cause. A second hypothesis is that overfunction of the adrenal and thyroid glands is responsible, but fever has been observed in adrenalectomized animals and endocrine mechanisms do not explain all of the observed phenomena of fever. The most tenable theory is that based upon the action of certain substances upon the hypothalamic centers. This is substantiated by the fact that fever does not develop in animals with injury to these centers.[2]

Recent evidence accumulated by Nesset et al,[3] with a complex polysaccharide fractionated from a Pseudomonas species, not only helps to substantiate this theory but also indicates rather conclusively that the pyrogen is a nonprotein and nonantigenic substance.

Before any discussion of fever one should know of the normal temperature variations.

The normal body temperature is generally stated to be 98.6°F. orally and 99.6°F. rectally, and the manufacturers of thermometers have them so marked. When taking a temperature the physician should remember that statistical analysis of data indicates a standard deviation of 0.47°F., and on this basis the average oral normal temperature would range from 97.0°F. to as high as 100.4°F.[2, 4] Nevertheless, it is necessary for the clinician to establish some base line as normal. With adults 99.0°F. is considered the upper limit of normal. In pediatric practice the rectal temperature is more accurate, and at the Children's Hospital elevation above 100.0°F. is considered as fever.

There is a diurnal variation in the body temperature which may be as great as 2°F., the highest temperature usually occurring in the late afternoon or early evening, the lowest between 2:00 and 4:00 a.m. This diurnal temperature rhythm does not become established until some time in the second year of life, usually about the time the child begins to walk.

In infancy the temperature regulating mechanism is extremely labile and dependent upon the environmental temperature, and when fever exists in the newborn and more particularly in the premature, the environmental circumstances at the time of temperature-taking should be taken into account, such as crib next to radiator or an overheated incubator.[5] Some lability of temperature regulation exists until the age of puberty, and the effects of exercise on body temperature are particularly marked in children where a strenuous game, as football, may raise the temperature 2.0°F. or higher.[2]

CAUSES OF FEVER

Infections are the most frequent cause of fever. This fact is so well appreciated that when fever is present a thorough search is made for an infection as the source. This is a commendable practice, but, as will be evident in subsequent portions of this paper, the search should not stop here. To list the infectious causes of fever would serve no useful purpose; therefore, only a few infections with a characteristic type of fever will be discussed.

It is of interest to note the difference in the temperature curves of two viral diseases which are characterized by a rash which is similar in both instances. In rubeola there is an early but slight rise in temperature which subsides for 24 to 48 hours to be followed by a marked elevation of temperature as the rash appears. In roseola infantum there are 4 days of high fever which falls by crisis when the morbilliform rash begins to appear. In these viral diseases the type of fever curve in relation to the time of appearance of the rash are so characteristic that they are practically diagnostic.

Of the bacterial diseases, rather characteristic fever curves are seen in relatively few. Mention should be made of the prolonged sustained high fever of pneumococcal pneumonia which is rarely seen today due to early treatment with the antibiotics. Localized collections of pus as exemplified by osteomyelitis and appendiceal abscess frequently have a hectic type of fever curve due to transient septicemia, and chills and sweating are frequently associated symptoms. A staircase rise of the temperature for several weeks followed by a plateau of remittent fever for 1 to 3 weeks and then a steplike fall to normal should make one think seriously of *S. typhosa* or *S. paratyphosa* as the causative organism of the fever. It should also be noted that malaria does not produce an intermittent fever in children but rather a continuous or remittent fever curve.

NEOPLASMS AS A CAUSE OF FEVER

Fever in malignant disease has been a well-substantiated fact frequently appearing in the older literature but now either not mentioned or relegated to a position of unimportance. This is largely due to the modern trend of replacing clinical findings by laboratory methods.[6]

The fever of malignant disease is not to be construed as due to pathologic complications of the neoplasm such as secondary infection. It is due to the neoplasm itself and is probably due to ulceration and necrosis.

Fever in malignant disease is often diagnosed as due to infection; the diagnoses have varied from localized collections of pus to tuberculous peritonitis and acute bacterial endocarditis. The types of fever curve seen in malignant disease without other discernible cause are several. The most frequent type is that of a temperature rise lasting only several days. The second most important is a remittent or intermittent type of fever curve.

Hypernephroma is a notorious cause of fever, which may even produce a hectic type of fever with chills and sweats. The lymphomas and leukemia may produce fever as the first symptom, and this symptom is almost invariably present. Note should be made here that the Pel-Ebstein type of fever is rarely seen in Hodgkin's disease even though it is characteristic of the condition.

The pyrexia of malignant disease is of significance in only approximately 3 per cent of cases.

Hemolytic anemias as sickle cell anemia or Cooley's anemia and erythroblastosis fetalis frequently have fever as a manifestation which becomes more marked during a hemolytic crisis. Anemias secondary to blood loss do not have pyrexia as a manifestation with the exception of gastrointestinal bleeding, which is frequently associated with fever.

DISEASES OF THE CENTRAL NERVOUS SYSTEM

Fever is a frequent manifestation in diseases of the central nervous system. It is a common finding after head injury, the extent of injury being directly related to the degree of trauma. A temperature of 103°F. or over is of grave prognostic significance. Among the signs of severe head injury is a temperature of 100°F. to 103°F., while a normal temperature along with absence of skull fracture and a normal respiratory rate prognosticates a good recovery.[7, 8]

In cerebral vascular accidents there is an elevation of temperature due to the presence of irritating hemoglobin in the cerebrospinal fluid. The irritating hemoglobin is a significant factor in temperature elevations due to trauma.

Following lumbar puncture the temperature may rise to 102°F. 1 to 2 hours after the tap is performed. The mechanism for this is unknown unless attributed to transient irritation of the meninges.

Diencephalic epilepsy may produce either fever or hypothermia as one of its many manifestations. I feel that familial autonomic dysfunction recently described as a clinical entity may well be included with diencephalic epilepsy as a cerebral cause of hyperthermia. There are, however, several differentiating factors between the two entities; the only one relative to this paper is the high frequency of hyperthermia (66 per cent) in familial autonomic dysfunction, whereas in diencephalic epilepsy there is usually a fall in the temperature well below normal.[9]

DRUG FEVER

Many drugs may cause fever after prolonged administration. Among these are the belladonna derivative, iodides, aspirin, bromides, morphine, barbiturates, and the sulfonamides. The importance of differentiating a fever caused by a sulfonamide from a fever due to the infection which the drug is used to combat need not be stressed in the present age of antibiotics where alternate therapy is available, but it should be kept in mind when treating patients over a prolonged period with these agents.[10] Ninth-day fever refers to the syndrome of fever, malaise, and skin eruption which occasionally occurs 7 to 10 days following the first injection of arsenicals.[11]

DEHYDRATION

An important type of fever in infancy is "inanition" or "dehydration" fever which responds very well to the administration of adequate fluids. In infancy and early childhood the fluid balance is so easily upset with resultant dehydration that this becomes a very important aspect in therapy. The symptomatic treatment often overshadows specific therapy directed toward the cause of dehydration, which may not be determined.[5]

MISCELLANEOUS CAUSES OF FEVER

As previously stated, this paper does not deal with all the causes of fever but discusses several of the various causes under general headings. There are a large number of causes of fever which do not come under any of these general headings but should be discussed briefly.

Thyrotoxicosis produces a rise in body temperature due to increased tissue metabolism, while abnormalities of the skin such as ichthyosis, congenital absence of sweat glands and thermogenic anhidrosis produce fever due to a failure to lose heat via the skin.[12]

The cause of fever in serum sickness and allergy is apparently due to an immune reaction to a foreign protein, but, as previously stated, the work of Nesset et al[3] may alter this view in the near future.[13]

There is still controversy among pediatricians as to the relationship of fever and teething. The consensus is that teething may be the only change noted in an infant with fever.

COMPLICATIONS OF FEVER

Herpes labialis ("cold sore," "fever blisters") is frequently associated with fever and may be seen in any condition which produces fever. It is most frequently associated with meningococcal meningitis and pneumococcal pneumonia. This complication of viral etiology does not confer immunity but makes the sufferer more prone to further attacks.

Albuminuria is frequently associated with fever, and results of experiments using the Kettering hypertherm clearly indicate that this type of albuminuria is not due to the action of the infectious agent on the kidneys.

The mechanism of chill is complex. There is an increase in heat production while heat loss remains normal. The stimulus for chill production appears to be the introduction of a foreign substance into the blood stream. When the time of introduction of a foreign substance into the blood stream is known, there is a lapse of approximately 1 hour before the production of the chill, and ideally blood cultures should be taken at that time.

Sweating is the counterpart of the chill. It is combined with a rich circulation to the skin to facilitate rapid dissipation of heat by vaporization. It is particularly associated in diseases with intermittent fever, as tuberculosis and rheumatic fever.

Febrile convulsions is a phenomenon limited to children and depends largely on the rapidity with which the temperature rises.

Delirium is frequently associated with fever, its presence depending on several factors, the height of the fever, the constitutional make-up of the patient, his previous health, and the nature of the underlying disease.

PROBLEMS OF DIAGNOSIS OF OBSCURE FEVER

Since fever is merely a symptom of an underlying disease, it behooves the practitioner to determine the source of fever. The diagnosis is not always an easy one and the clinician is often faced with the problem of an obscure fever. In the experience of Hamman and Wainwright[14, 15] and others[16, 17] with obscure fever a definite diagnosis is made in only about half of the cases of obscure fever, even after repeated examinations and careful laboratory tests.

The elucidation of the cause of obscure fever required a knowledge of the various diseases likely to be responsible and a reasonable suspicion of their presence. When physical, X-ray, immunologic and bacteriologic examinations are negative, it is advisable to carry out therapeutic tests, which are sometimes the only way to make a diagnosis.

Sepsis in some locations may be more or less silent; perinephric and subdiaphragmatic abscess, and occasionally osteomyelitis may not have any local manifestations, and paranasal sinusitis may exhibit pyrexia as its only symptom. Careful physical and X-ray examinations may serve to rule these entities in or out of the differential diagnosis.

Subacute bacterial endocarditis for practical purposes may be eliminated from the differential diagnosis, if a heart murmur is not present.

Extrapulmonary tuberculosis is usually considered first in an obscure fever. The simple procedure of using P.P.D. or O.T. will serve in almost all instances to eliminate this diagnosis, if the test is negative, but it does not definitely indicate active disease if positive. Brucellosis, another granulomatous disease, has been overemphasized as a cause of obscure fever.

Chronic meningococcal septicemia probably occurs more often than is realized and should be suspected when there are fever, leukocytosis, joint pains and erythematous eruption of the extremities.

Rheumatic fever may be manifested without the findings of joint pain. The diagnosis may be made by the presence of a heart murmur, prolongation of P-R interval, and/or response to salicylate therapy.

As previously mentioned, neoplasm may cause various types of fever curves. Hypernephroma may manifest itself by fever without other symptoms and should be suspected in obscure fever.

The use of therapeutic tests in obscure fever may be the only method by which a diagnosis may be made. The present use of the sulfonamides and antibiotics when a source of pyrexia is not determined is neither to be condemned nor condoned. Despite the lack of definite diagnosis in these cases, many lives have been saved by this procedure. Contrariwise, such indiscriminate use of these drugs often masks the underlying disease, delaying definitive and adequate therapy, and also increasing bacterial resistance against the agent used. Other therapeutic tests, some of which were previously mentioned, are the use of salicylates for rheumatic fever, quinine and the more recently developed primaquine, chloroquine, etc., in suspected malaria, emetine for amebiasis, and roentgen radiation in suspected Hodgkin's disease.

Fever of Undetermined Origin

A discussion of fever would be incomplete if this "entity" were not included. As stated previously, Hamman and Wainwright et al found a definitive diagnosis for the cause of obscure fever in only 50 per cent of cases studied. Recent investigations have probably decreased the percentage of F.U.O.'s, but it is still high.

Many of the answers to F.U.O. may be uncovered with the isolation and study of various viruses. The recently described Coxsackie virus of herpangina has undoubtedly lowered the percentage of F.U.O.'s.

It seems very probable that some of the F.U.O.'s reported today may be due to abortive poliomyelitis or to other diseases whose course has been aborted before diagnostic clinical features have developed. Although great strides have been made to clarify the picture of "fever of undetermined origin," this "entity" exists today and will continue to be written as a final diagnosis on hospital charts.

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REACTION TO DIPHENYL HYDANTOIN SODIUM

Report of a Case Simulating Rocky Mountain Spotted Fever and Review of Literature

STANLEY H. STEINBERG, M.D.
Washington

OF THE anticonvulsant drugs in use in the treatment of epilepsy and epileptiform disorders, diphenyl hydantoin sodium (phenytoin sodium or dilantin) and the hydantoin group have achieved the most notable results. Most anticonvulsants contain one chemical similarity, a phenyl group in terminal position. However, the direct anticonvulsant activity of any of these drugs has not yet been assigned to any single one of its component chemical radicals.[1] That the phenyl group was of importance was suggested first by the fact that, in both animal tests and clinically, phenobarbital was a very effective anticonvulsant, whereas other barbiturates were not.[2] Harrison et al[3] found that conjugated phenols were responsible for motor depression in uremia. On the basis of this information study of large numbers of phenyl derivatives led to the discovery and demonstration of the anticonvulsant action of diphenyl hydantoin sodium.

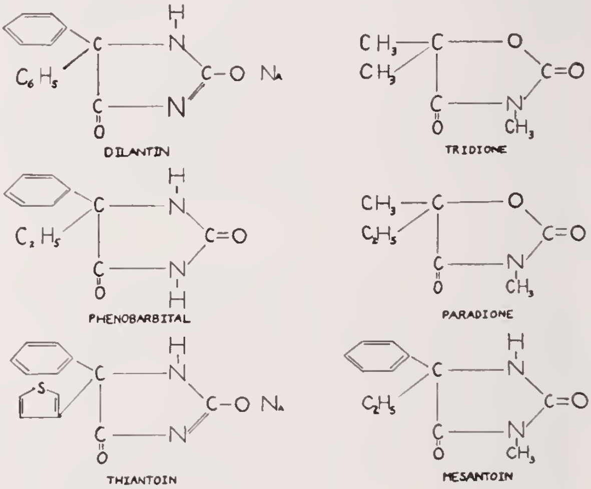
Since 1937 diphenyl hydantoin sodium has been used in increasing amounts in the treatment of epilepsy. A number of other chemically closely related drugs, the hydantoin group, including mesantoin, thiantoin, paradione and tridione, have been developed and are in current use.

Reference to the accompanying chart will show the close relationship of the chemical structure of the drugs used currently in the treatment of epilepsy.

Clinical experience and use of dilantin have proved it to be the most potent specific anticonvulsant available for treatment of epilepsy and epileptiform disorders.[4] However, dilantin and the remainder of the hydantoin group are not without definite toxic reactions and side-effects which range from a mere sense of "unpleasantness" to severe and fatal reactions. The incidence of toxicity has varied from 58 per cent[5] to 93 per cent[6] of cases studied.

CHART 1

Chemical Structures of Drugs Used in Treatment of Epilepsy



Reactions or sensitivities to dilantin can best be classified according to system involvement as follows:

1. Central nervous system: Neuropsychiatric symptoms are by far the most common of those encountered. These reactions include ataxia, nervousness, sleeplessness, sleepiness, dizziness, tremors, psychoses including delusions and hallucinations, diplopia, nystagmus, hemiplegia, status epilepticus, toxic amblyopia, and hyper-

pyrexia. Dilantin has been shown to produce these side-effects with or without concurrent phenobarbital therapy.[4]

2. Genitourinary system: Albuminuria[7] and occasional increase in libido.[8]

3. Gastrointestinal system: Nausea, vomiting, gastritis, hepatitis, and jaundice.

4. Hemopoietic system: Agranulocytosis, hematoporphyrinuria,[9] eosinophilia, leukopenia, hepatic enlargement, and fatty infiltration of the liver.

5. Cardiovascular system: Evidence of myocardial damage, electrocardiographic changes, epistaxis,[10] facial edema,[9] oliguria,[9] and decreased blood urea.[9]

6. Skin and mucous membranes: Skin reactions are common in 5 to 10 per cent of all patients.[8, 11] The cutaneous reactions are usually simple toxic erythemas, morbilliform or scarlatiniform in appearance, occurring most often within 2 weeks of institution of therapy, and accompanied by fever. Fatal hemorrhagic erythema multiforme[12] and 2 cases of periarteritis nodosa,[13] 1 with accompanying exfoliative dermatitis and fatal outcome,[14] have been reported. The toxic erythemas are occasionally accompanied by eosinophilia. Cutaneous reactions such as these often disappear spontaneously, even though therapy is continued. Skin reactions which appear less commonly are urticarias, widespread furunculosis,[9] and nonthrombocytopenic purpuras (purpura simplex). Hirsutism is occasionally noted in adolescent girls.[8] Gingival hypertrophy is often encountered.

REPORT OF CASE

A.W., an 11-year-old white male child, became ill with fever and listlessness on August 25, 1953. Twelve hours after onset of illness a few, small macular erythematous areas were noted on the hands, including the palms, the wrists and the forearms, and the dorsa and soles of the feet. The child was put to bed, and symptomatic therapy was started by the parents. The temperature continued to fluctuate. Within 24 hours the eruption had spread centripetally to involve the entire body, appearing morbilliform. On August 28, 1953, when the temperature had reached 106°F. with the child very jittery and disoriented, and since the "measles cough" had not yet developed, the doctor was called and hospitalization was advised. The child was admitted to Children's Hospital, Washington, D. C. (record no. 53-9052), August 28, 1953. No history of tic, rat or cat bite or contact with any animal was elicited.

Generalized epileptic seizures occurring on several occasions were noted at 3 years of age but have not reappeared since. In the past 6 to 12 months he had attacks of petit mal as well as episodes of mild ataxia and intervals of confusion. After neurologic consultation approximately 2 weeks before admission, dilantin, 0.03 Gm. (½ gr.) q.i.d., and phenobarbital, 0.015 Gm. (¼ gr.) q.i.d., running concurrently had been started. Electroencephalographic evidence of petit mal and psychomotor epilepsy had been demonstrated.

Physical examination revealed an acutely ill white male child, moderately disoriented, restless and very jittery, slight inflammation of the posterior pharynx, nasal mucosa and palpebral conjunctivae, slight enlargement of anterior cervical lymph nodes, hyperactive reflexes and bilateral ankle clonus, and a maculopapular, generalized, non-scaly, mildly pruritic erythematous eruption including the palms, soles and buccal mucosa. Throughout the eruption was scattered a moderate number of petechiae. The temperature was 103.4°F., the pulse rate 90, the respiratory rate 24, and the blood pressure 106/64.

Considerations were Rocky Mountain spotted fever and dilantin reaction. The temperature fluctuated between 101.8°F. and 103.8°F. for 48 hours and then gradually dropped to normal. Intravenous fluids were given for the first 24 hours only. Aureomycin, 250 mg. q. 4 h., was given for 48 hours and then 250 mg. q. 6 h. for 48 hours. Within 72 hours the eruption had almost entirely faded. Whenever a tourniquet was applied for venipuncture, showers of petechiae were noted in the entire forearm. Ankle clonus disappeared on the fourth day of hospitalization, but a mild degree of slowness and difficult speech persisted even after discharge. Dilantin and phenobarbital were both stopped on admission to the hospital. Hibicon, 500 mg. q.i.d., was started on the second day of hospitalization because it was felt that this child definitely needed anticonvulsant therapy. Hibicon was chosen for its relative lack of toxicity[15, 16] and the fact that its chemical structure is completely different from that of the hydantoin group.

Urinalysis, spinal fluid examination, blood culture, nose and throat cultures, Kahn test, and X-ray films of the chest were negative or normal. Heterophile antibody test was negative, and agglutination tests for the Rocky Mountain spotted fever group done at the National Microbiological Institute were negative, as were other agglutination tests including the Weil-Felix reaction on the fourth and eleventh days of the illness. A bone-marrow examination on the sixth day of illness showed a leukoid-erythroid ratio of 5:1, numerous megakaryocytes, some stimulation of the myeloid elements, and no evidence of bone-marrow depression.

The blood studies in this case (see table 1) demonstrate several side-effects of dilantin: tendency to leukopenia and eosinophilia and absence of thrombocytopenia.

TABLE 1

Hematologic Data during Hospitalization

DAY IN HOSPITAL	HEMOGLOBIN	MICRO HMT%	WBC	SEG	BANDS	YOUNG	LYMPHS	MONO	EOSIN	PLATELETS
1	11.2	37	5.6	52	3	4	29	9	1	
2	10.6	37	7.0	51	18	2	22	1	6	250,000
4		37	4.5	20	25	8	38	1	3	236,000
5			3.1	18	13	3	58	6	2	
6	13.1	40	4.2	24	6	2	61	7	0	
7			6.6	32	9	2	51	1	5	

DISCUSSION

The recommended dose of dilantin[17] for adults is 0.1 Gm. (1½ gr.) t.i.d., increased, if necessary, to 0.2 Gm. (3 gr.) t.i.d. For children 6 years of age or over 0.1 Gm. (1½ gr.) t.i.d., increased, if necessary, to 0.1 Gm. (1½ gr.) q.i.d. is recommended. The amount of drug necessary to cause side-reactions varies with the individual case.[18]

Fetterman[19] in a study of 28 cases over an 11-month period noted neuropsychiatric complications in 15 of the 28 at some time during therapy. The majority of his patients were found to have these symptoms within the first few weeks of treatment. Merritt[11] found nervousness and slightly unsteady gait often occurring during the first few days of therapy, but these were of a transient nature. A dose of greater than 0.27 Gm. daily with or without phenobarbital gave severe drowsiness, ataxia and mental confusion,[4] and nystagmus and ataxia develop in the majority of patients when the dose is increased over 0.5 Gm. daily. It is possible that dilantin, when ingested in large quantities, becomes fixed in brain tissue in fatal concentration, having been reported in 1 case in a concentration of 6 mg. per 100 c.c. of brain tissue.[20] In 1 case from private practice a 4-year-old girl receiving 0.1 Gm. dilantin b.i.d. for the treatment of grand mal epilepsy developed on the fourteenth day of therapy such a severe ataxia that she could not get out of bed for 48 hours after withdrawal of the drug. Most neuropsychiatric complications are reversible on withdrawal of the drug. However, hemiplegia[21] and softening of the brain are numbered among the nonreversible effects.

The cause of gastric distress is presumably due to the high alkalinity of the drug and has been effectively combatted by giving it at mealtime or disguised in cream or milk.

Definite reactions of the cardiovascular system have been demonstrated experimentally and clinically. Intravenous injection of dilantin and its sodium derivative resulted in lowering of arterial pressure and slowing of the heart rate, these effects being reversible up to 0.02 Gm.[22] Dilantin may be directly hepatotoxic, because after intravenous injection it is first concentrated in the liver.[23] Blair[21] in reporting 8 deaths found myocardial damage in 2 cases which he believed due directly to dilantin. Finkelman[6] with a series of 44 cases showed the electrocardiographic changes to be the following: in 50 per cent—increased P-R interval, in 78 per cent—decrease in height of T waves, and in 100 per cent—some changes in the QRS complex. In massive doses dilantin exerts a uniformly depressive effect on cardiac action, causing impairment of conduction throughout the heart, perhaps making fibrillation more prone to occur.[18, 20, 24]

The most recent studies and reports demonstrate in particular the cutaneous and hemopoietic reactions and lead us to believe that these reactions occur more frequently than has been previously considered. It is important to note the recent recognition of more severe and occasionally fatal erythema multiforme and hemorrhagic and nonhemorrhagic exfoliative dermatitides. In cases in which hemorrhagic phenomena have been described nonthrombocytopenic purpura has been the only type observed.[25] However, from necropsy reports it has been shown that hemorrhagic phenomena may involve almost every organ of the body.[12]

Eosinophilia occurs with or without accompanying cutaneous eruption but most often with one. More than 5 per cent eosinophilia was noted in 6 patients studied by Merritt,[8] and 65 per cent of cases in McCartan's series[26] showed a rise in the number of circulating eosinophils. During the early weeks of medication transient eosinophilia usually occurs in connection with dermatitis. Marked eosinophilia of bone marrow, as high as 57 per cent of the granulocytic series, has been observed.[27]

Leukopenia (20 cases) due to a decrease in number of granulocytes,[26] 1 case of severe leukopenia (820 white blood cells per cu. mm.),[28] and agranulocytosis in 1 case on prolonged therapy[18] have been observed.

In 2 cases periarteritis nodosa was the presenting symptom-complex[13, 14] with involvement of the liver, jaundice and hyperpyrexia. One of these patients[14] was treated with cortisone with an excellent suppressive effect on the reaction. However, relapse and fatal termination followed because of too rapid withdrawal of cortisone.

Skin and hemopoietic reactions are apparently much more frequent and serious than formerly considered. Fever, rash and eosinophilia, particularly rash, occurring during the course of dilantin or hydantoin therapy should be regarded as absolute indications for withdrawal of the drug, since these signs and symptoms can be regarded only as mild indications of severe and widespread underlying reactions of the vascular and hemopoietic systems. It follows necessarily that anticonvulsant therapy in the place of dilantin, when reaction or sensitivity has once occurred, should not include any drug of similar chemical structure, lest the reaction be furthered.

SUMMARY

A case of reaction to diphenyl hydantoin sodium simulating Rocky Mountain spotted fever is presented. Dilantin is very valuable but extremely toxic. Fever, rash and/or eosinophilia occurring during the course of dilantin therapy should be considered absolute indications for immediate drug withdrawal.

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(Continued on page 638)

NOREPINEPHRINE IN THE TREATMENT OF THE WATERHOUSE-FRIDERICHSEN SYNDROME

Report of a Case

TE-CHUAN CHOU, M.D.
Resident Physician

S. GEORGE ANAGNOS, M.D.
Assistant Resident Physician, Central Dispensary and Emergency Hospital, Washington

FULMINATING meningococcal bacteremia with peripheral circulatory failure and hemorrhage into the adrenals occurs in 2 to 3 per cent of patients ill with meningococcal infection.[1, 2] It was the cause of death in 42 per cent of 300 fatal cases analyzed by Daniels.[3]

The illness usually starts with upper respiratory symptoms, generalized muscular and joint pain, headache, nausea, vomiting, chill and fever. Within a few hours there are apprehension, restlessness, delirium and signs of profound shock with cyanosis, low blood pressure, rapid, thready or imperceptible pulse, and cold, clammy extremities. Purpuric and ecchymotic rash soon develops, often covering most of the body. Signs of meningitis are usually absent or minimal. Before the advent of sulfonamide therapy the disease was invariably fatal, often within 24 hours.[4] Since the introduction of sulfonamides the over-all mortality of meningococcal infections has been markedly reduced, and a few cases of Waterhouse-Friderichsen syndrome ending in recovery have been reported. However, the majority of patients with this illness still die, often in spite of early and heroic treatment.

Cortisone has been used recently as an additional tool to combat the adrenal insufficiency incident to the adrenal hemorrhage. Recovery has been attributed to its use in several cases.[5-7] Norepinephrine, a sympathomimetic primary amine, has been used in the treatment of various forms of medical shock.[8-13] Its potent pressor effect suggested its possible value in treatment of the severe peripheral vascular failure associated with Waterhouse-Friderichsen syndrome.[14] It is the purpose of this paper to report the use of this material in a patient with Waterhouse-Friderichsen syndrome and to show that though the illness ended fatally, the blood pressure could be maintained at almost any desired level by varying the flow of a solution containing norepinephrine into the vein.

REPORT OF CASE

A.R., a 53-year-old woman, was admitted to Emergency Hospital on May 8, 1953, because of mental confusion and difficulty in speaking of a few hours' duration. She was apparently well until about 2 p.m. of the previous day (12 hours prior to admission) when she developed a sore throat and headache. At 4 p.m. on that day she had a shaking chill with nausea but no vomiting. This was followed by profuse perspiration. That night she became confused and unable to speak clearly and was admitted to the hospital at 2 a.m.

On admission the temperature was 106.4°F., the pulse rate 100, and the blood pressure 80/60. The patient was a well-developed, slightly obese white woman who appeared acutely and critically ill. She was pale, moderately cyanotic, restless and mentally confused. The skin was warm and moist, but no eruption was seen. The pupils were equal and reacted to light. The fundi were normal. The ears and nose were normal. The pharynx showed moderate congestion, and the neck was supple. The heart was not enlarged, and its sounds were of poor quality; the rhythm was regular, and no murmurs were present.

The lungs were clear. The abdomen was slightly distended but soft. All extremities showed normal power and movements. The deep tendon reflexes were hypoactive. The Kernig and Babinski signs were not elicited.

The initial laboratory examinations were reported as follows: hemoglobin 12.5 Gm. per cent, leukocytes 1,800 with 59 per cent lymphocytes, 1 per cent monocytes and 40 per cent neutrophiles. Repeated leukocytic count 12 hours after admission showed the total count to be 45,000 with 6 per cent lymphocytes, 6 per cent monocytes and 88 per cent neutrophiles. A urinalysis showed albumin, 100 mg. per cent, and 10 to 12 leukocytes, 1 to 2 erythrocytes per high power field, and 2 to 3 granular casts per low power field. A blood culture later grew *Neisseria intracellularis*. An X-ray film of the chest showed the heart and lungs to be normal.

A positive diagnosis was not made on admission, but bacterial pneumonia of a fulminant character was suspected. The patient was placed in an oxygen tent and 1,000 c.c. of 5 per cent glucose in distilled water by hypodermoclysis was begun. Procaine penicillin, 600,000 units, was given intramuscularly. Four hours after admission the blood pressure dropped to 44/28 and purpuric skin lesions were noted over the extremities. Ten hours after admission the patient was comatose, in shock, and pulseless, and no blood pressure could be obtained. The cyanosis was particularly marked over the extremities. A widespread hemorrhagic rash developed over most of the body. The lesions varied in size from pin-point petechiae to ecchymotic areas 2 inches in diameter. There were subconjunctival hemorrhages as well as submucous hemorrhages in the mouth and lips. The clinical features at this time were those of a fulminant meningococcal bacteremia with Waterhouse-Friderichsen syndrome. Treatment was directed toward the simultaneous combating of infection, shock, and adrenal insufficiency.

For the control of infection an initial dose of 6 Gm. of sodium sulfadiazine was given intravenously in 1,000 c.c. of 5 per cent glucose in isotonic sodium chloride solution. Subsequent dosage was guided by blood level determinations at intervals of 4 to 6 hours, aiming at a range of 15 to 20 mg. per 100 c.c. of blood. One million units of aqueous penicillin was given every 2 hours intramuscularly following an initial dose of 500,000 units intravenously. For the management of shock and adrenal insufficiency 60 c.c. of aqueous adrenal cortical extract was given intravenously. Cortisone was also administered, and the initial dose consisted of 300 mg. intramuscularly, 75 mg. in each of 4 separate sites, with doses varying from 50 to 100 mg. every 4 to 6 hours, if the total circulating eosinophiles were not 15 per cu. mm. or less. Norepinephrine was administered in the intravenous fluids in a concentration of 4 mg. per liter of fluid. A prompt pressor response was obtained from this. The blood pressure rose from an unobtainable level to 100/60 almost immediately and was maintained at a satisfactory level after an optimal speed of the drip had been attained (figure 1). However, any interruption or retardation of its administration was followed almost instantly by a significant drop in the blood pressure.

In the course of the first 24 hours of hospitalization a total of 5,300 c.c. of fluid was given, including glucose, sodium chloride and plasma. In spite of this, only 180 c.c. of urine was excreted, and consequently the volume of fluid administered was thereafter kept at a minimum, consistent with the delivery of norepinephrine to maintain satisfactory blood pressure levels.

On the second hospital day the patient's condition was unimproved, but the temperature had fallen to 100°F. She remained mentally confused and vomited repeatedly. The neck had become stiff, the hemorrhagic areas were darker, and hypersensitiveness to light touch developed over the entire body. Signs of congestive heart failure with tachycardia and bilateral pulmonary basal rales ensued. The blood nonprotein nitrogen was 48 mg. per cent. The blood sugar, serum potassium, and serum chloride were within normal limits. Rapid digitalization with Cedilanid was accomplished, and the isotonic sodium chloride solution was discontinued. The volume of fluid given intravenously was reduced to a minimum, just enough to preserve the patency of the channel leading to the vein. Consequently, norepinephrine had to be administered in a much higher concentration if its pressor effect was to be maintained; 24 mg. (24 c.c.) of norepinephrine was introduced into each 1,000 c.c. of fluid, instead of the usual 4 mg. per liter. A total of 1,600 c.c. of fluid was given during the second 24-hour period. The urinary output remained scanty (160 c.c.).

On the third day the temperature was 103°F. and the pulse rate 120. The blood pressure was maintained at a satisfactory level. Some of the hemorrhagic areas in the skin began to form blebs. The subconjunctival hemorrhages of the right eye became more marked. There were signs of consolidation in the left lower lobe. The output of urine remained low but presented some gradual increases after shock levels of the blood pressure were avoided. The blood nonprotein nitrogen rose to 92 mg. per cent. Complete coma developed. The respiratory rate increased to 46 per minute. Gallop rhythm was noted, and the patient died 64 hours after admission and 76 hours after the onset of the illness.

Autopsy was done 4 hours after death by Dr. Frank W. Konzelmann. The skin and mucous membrane presented purpuric hemorrhages as previously described. The heart showed acute degeneration of the myocardium with myocardial hemorrhage. There were bilateral hydrothorax with intense bilateral pulmonary congestion and hemorrhage. Passive congestion was present also in the liver, spleen and kidneys. The small intestine showed submucous and subserous hemorrhages. Focal encephalitis was found in the brain, and meningitis was present. The adrenals were brownish yellow and very friable. There was marked congestion of all blood vessels. This included the arterioles within the pericapsular fat, the smaller vessels and capillaries within the cortex, and capillaries and veins in the medulla. The cortical cells were layered in the usual pattern and were well preserved in many areas. In some areas of the gland, however, the long columns of the zona fasciculata were pushed apart by dilated congested capillaries. In still other areas of the gland, there was actual hemorrhage within the cortex, extending all the way from the zona glomerulosa down to the medulla. In the areas of hemorrhage some of the cells of the cortex had been destroyed. Capillary congestion was marked in the medulla. There was actual hemorrhage in only 1 small area of the medulla. The cells of the cortex, where they were preserved, showed normal lipoid vacuolization.

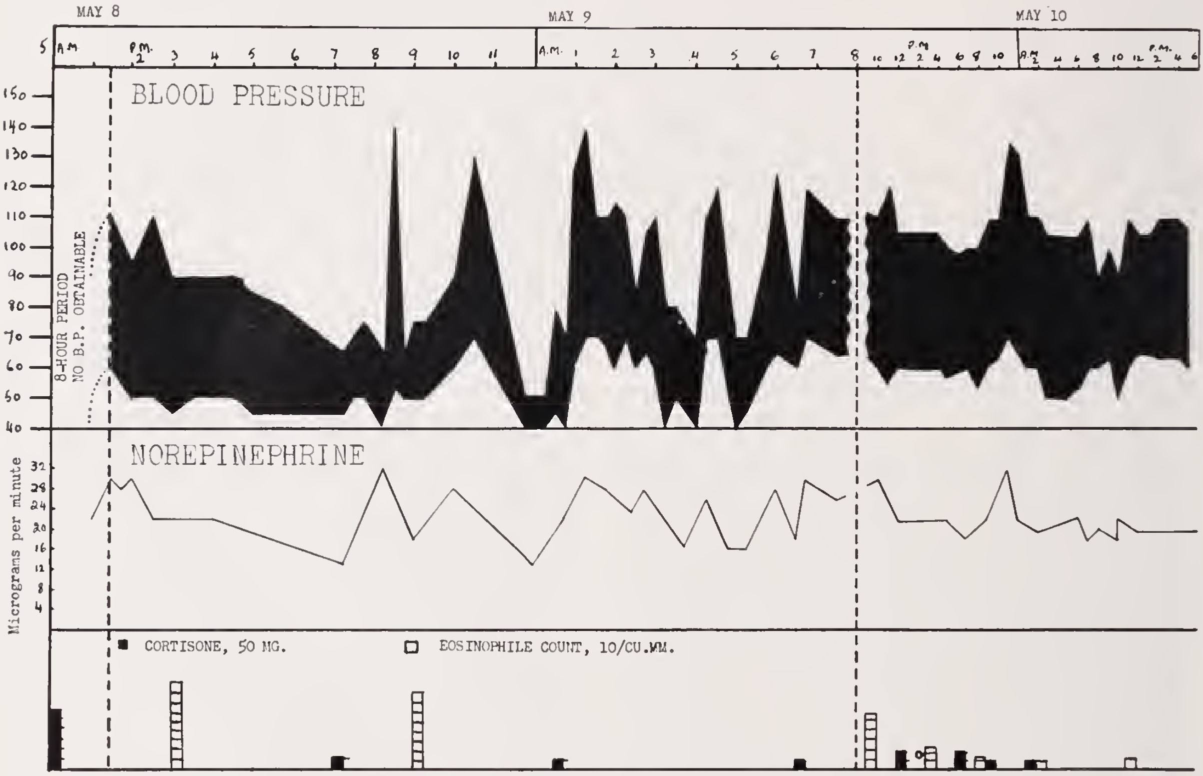

Fig. 1. Response of blood pressure to administration of norepinephrine in a case of Waterhouse-Friderichsen syndrome, the dosage of cortisone used, as guided by total eosinophile counts, being also presented.

Comment

There are 3 essential objectives in the treatment of the Waterhouse-Friderichsen syndrome. These are the control of infection, shock, and adrenal insufficiency. Since meningococci are extremely sensitive to sulfadiazine and penicillin, early administration of these in adequate dosage will bring the infection under control in the majority of cases. This was true in the case reported. Cultures of heart blood and cerebrospinal fluid at autopsy grew no organism. Shock and adrenal insufficiency remain the major problems responsible for a fatal outcome. They require prompt and energetic measures. Cortisone is a valuable adjunct in substitutional therapy for adrenal cortical insufficiency and should be used in addition to fluids, plasma, sodium chloride, glucose and aqueous adrenal cortical extract.

Norepinephrine differs from epinephrine only by the absence of an N-methyl group. It is produced by the adrenal medulla along with epinephrine. Human adrenals contain from 10 to 20 per cent of norepinephrine, and U.S.P. epinephrine (extract of cattle adrenals) contains about 18 per cent.[15] When given by continuous intravenous infusion it produces a generalized arteriolar, capillary and venous vasoconstriction with an increase in total peripheral resistance and resultant increase in systolic, diastolic and mean systemic arterial blood pressure. The cardiac output is little affected. The pulse rate is decreased.[16] The drug has been used in the treatment of peripheral vascular collapse associated with myocardial infarction and other miscellaneous conditions such as peritonitis, pulmonary embolism and sepsis.[8-13] Satisfactory responses were obtained in the majority of patients ill with these conditions, although they may not have survived because of the serious nature of the underlying disease.

In the case presented the blood pressure rose to a satisfactory level in a matter of 1 to 2 minutes after the infusion was started and could be maintained at almost any desired level up to the time of death. The wide range of variation in the blood pressure curve in the first day of administration was due to the frequent interruptions of flow by the administration of other medications and procedures. Prompt elevation of the blood pressure was obtained each time after the normal speed of the drip was resumed. Such immediate and continuous, easily controllable effect has obvious advantages over other agents previously used. In this patient the fact that the blood pressure dropped immediately each time the flow of norepinephrine was stopped indicated that cortisone alone was not able to maintain the pressure level, although enough had been given to keep the total circulating eosinophile count at 15 per cu. mm. or less.

The limitation of fluids because of congestive heart failure and probable lower nephron nephrosis incident to shock necessitated the use of a higher concentration of norepinephrine than is usual. As much as 24 micrograms per liter of fluid was used. No signs of venospasm or phlebitis along the course of the polyethylene catheter, through which the infusion was given, were seen.

SUMMARY

A case of Waterhouse-Friderichsen syndrome in which intravenous norepinephrine exerted a beneficial effect upon the extreme hypotension of this disease has been reported. It is hoped that others may explore its use in order to clarify its place in treatment.

ADDENDUM: According to Winthrop Stearns, Inc. the use of norepinephrine (Levophed) in saline solution alone is not recommended. Fluids containing dextrose should be employed in order to avoid significant loss of potency due to oxidation.

N.B. The authors wish to thank Dr. Lawrence E. Putnam for his kindness in allowing them to report his case and to express their gratitude to Dr. Worth B. Daniels, the consultant on the case, for his help and advice in the preparation of this paper.

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E. COLI MENINGITIS

Report of a Case Successfully Treated with Streptomycin and Terramycin

WILLIAM PEASE, M.D.
Medical Resident

JOHN T. ALEXANDER, M.D.
Chief Medical Resident, Georgetown University Medical Division, District of Columbia General Hospital.

THE coliform organism *Escherichia coli* (*E. coli*) is a frequent cause of infection in pyelonephritis. Infection of the meninges with this organism, however, is a rare event, particularly among adults. The case to be reported here is one of concurrent pyelonephritis, *E. coli* bacteremia and meningitis successfully treated with streptomycin and terramycin.

Report of Case

A 33-year-old colored man entered District of Columbia General Hospital on December 3, 1952 because of chills and fever of 1 day's duration. The patient had been a heavy drinker for several years and for the past 7 years had been subject to irregularly occurring grand mal convulsions, frequently precipitated by alcoholism. Nine months prior to entry he had 2 brief attacks of left flank pain radiating into the groin. Three months prior to entry he had an episode of chills and fever subsiding spontaneously.

The present illness followed a prolonged bout of alcoholism and was ushered in with chills, fever and headache terminating in 3 grand mal convulsions on the morning of admission.

In the past the patient had malaria contracted while with the Army in India and neurosyphilis diagnosed and treated at the Health Department Clinic in 1948.

When examined on admission the patient was acutely ill, combative, disorientated, and sweating profusely. The rectal temperature was 102.6°F., the pulse rate 100, the respiratory rate 20, and the blood pressure 160/100. There was no evidence of injury to the head or spine. The significant findings included grade I hypertensive retinal changes, absence of nuchal rigidity, a few rales at the left base, a grade III mitral systolic murmur without cardiomegaly, and an enlarged, non-tender liver felt 4 cm. below the costal margin. The kidneys could not be palpated. The prostate was normal. The neurologic examination was normal on admission.

The initial laboratory work included a white blood cell count of 11,700, a hematocrit of 41 per cent, cloudy urine with a specific gravity of 1.025, albumin 3 plus with the sediment loaded with leukocytes. An X-ray film of the chest showed some accentuation of the vascular markings. The electrocardiogram was normal. The spinal fluid pressure was 180 mm. of water, and the fluid was cloudy and contained 2,500 cells per cu.mm., with 85 per cent neutrophils. A smear of the spun sediment showed gram negative rods and cocco-bacillary forms, some located intracellularly. The spinal fluid sugar was 33 mg. per cent, and the protein 500 mg. per cent; the colloidal gold curve was 5555443211.

While awaiting the result of spinal fluid and blood cultures, combined antibiotic therapy was started using intravenous sulfadiazine with streptomycin and large doses of penicillin. The following morning cultures of the blood and spinal fluid were positive for *E. coli*. Penicillin was then discontinued and replaced with intravenous terramycin.

For the first 4 hospital days the patient remained confused and lapsed periodically into delirium tremens. The temperature fell to normal by the end of the fourth day. The spinal fluid cleared gradually, showing 103 cells on the fifth day and 14 cells on the twelfth day. All cultures of the blood and spinal fluid were negative after treatment was started. The urine remained cloudy, and cultures were positive for *E. coli* until the sixth day. The urinary output remained satisfactory.

The patient's further course was complicated only by a wound abscess at the site of a venous cut down. He was otherwise asymptomatic and much improved at the end of a week. Cystoscopy and retrograde pyelography failed to demonstrate any urinary tract abnormality. The patient was discharged free of infection after 27 days of hospitalization.

E. coli meningitis is an uncommon infection. Paine et al[1] in tabulating the incidence of gram negative meningitides among over 8,500 cases of meningitis gave to *E. coli* an over-all incidence of only 0.37 per cent. Neal[2] found only 8 cases due to *E. coli* among 3,178 cases of meningitis. Rausch and Krinsky[3] have emphasized that, although meningitis is much less common in infancy than in childhood, among the newborn the coliform bacilli are the commonest cause of meningitis. A number of reports dealing with meningitis of the newborn concluded that *E. coli* is the causative organism between 30 to 50 per cent of cases.

A striking feature of this infection in infancy appears to be a lack of resistance to the coliform bacilli. It is the exception rather than the rule to identify the source of the infection in infants, though it seems likely that a bacteremia is almost always present. Among proven sources of infant meningitis have been otitis media, pyelonephritis, spina bifida, and umbilical infection. In adult cases the source of the infection is nearly always demonstrable. The meningitis is produced either by a direct extension to the meninges or as a metastatic focus during bacteremia. The greatest number of cases are a consequence of penetrating wounds of the head or spine. *E. coli* has been implicated in cases of secondary meningitis arising from contaminated equipment used in spinal taps. Coliform meningitis has been seen to follow the bacteremia that may be associated with infected abortion or prostatic resection.

Prior to the introduction of the sulfonamides in 1935 a meningeal infection with *E. coli* carried a virtually hopeless prognosis. Barrett et al[4] in their review of the world's literature up to 1941 noted 108 cases of coliform meningitis. The gross fatality rate was 78 per cent. Their review included 5 cases that had recovered since 1935 as the result of sulfonamide therapy. With the introduction of streptomycin and more recently the broad spectrum antibiotics the prognosis for *E. coli* meningitis has been improved considerably.

Table 1 provides a summary of data obtained from a review of 35 cases of *E. coli* meningitis in the American and English literature since 1941. The over-all mortality rate remains as high as 40 per cent. It should be pointed out, however, that 10 of the 14 deaths occurred in a series of meningitis complicating penetrating war wounds of the head and spine treated with sulfadiazine and penicillin in addition to any necessary surgery. It is also apparent that the source of the infection in infants may remain obscure.

TABLE 1

35 Cases of E. Coli Meningitis[1-21]

AGE GROUP	NUMBER OF CASES	SOURCE OF INFECTION		RECOVERED FROM ACUTE INFECTION	DIED	MORTALITY
		Known	Unknown			
						%
Infants (up to 3 months)	6	0	6	5	1	16.7
Adults and children	29	24	5	16	13	44.8

SUMMARY

We have reported a case of *E. coli* meningitis complicating pyelonephritis and bacteremia in a young man. The patient was successfully treated with streptomycin and terramycin without the necessity of intrathecal medication. Data obtained from a review of 35 cases of *E. coli* meningitis reported since 1941 have been tabulated.

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(*Continued on page 638*)

President's Page

CIVIL DEFENSE

RECOGNITION OF THE FACT THAT SINCE WORLD WAR II THE MEDICAL PROFESSION HAS PRECEDED ALMOST ALL OTHER GROUPS OF THE POPULATION IN STRESSING THE NEED FOR AN ADEQUATE CIVIL DEFENSE WAS GIVEN BY THE HONORABLE VAL PETERSON IN HIS ADDRESS BEFORE THE GEORGETOWN UNIVERSITY MEDICAL ALUMNI ASSOCIATION LUNCHEON AT THE HOTEL STATLER ON OCTOBER 6.

SOME OF THIS HAS BEEN PREVIOUSLY DOCUMENTED IN THE MEDICAL ANNALS.* PHYSICIANS, BOTH THROUGH THE AMERICAN MEDICAL ASSOCIATION AND THROUGH THEIR LOCAL ORGANIZATIONS, HAVE CONTINUALLY CALLED ATTENTION TO THESE NEEDS AS URGENT, AND HAVE PARTICIPATED WIDELY IN ORGANIZED EFFORTS TO SEE THINGS ACCOMPLISHED.

UNFORTUNATELY, IN THE DISTRICT OF COLUMBIA THERE IS A TYPE OF GOVERNMENT WHICH RENDERS IT IMPOSSIBLE FOR ITS CITIZENS TO DO WHAT IS BEING DONE, FOR EXAMPLE, IN STATES LIKE CALIFORNIA, NEW YORK AND OTHERS WHERE THE CITIZENS MAKE THEIR OWN LOCAL LAWS AND THROUGH THEIR STATE REPRESENTATION SET UP THEIR OWN CIVIL DEFENSE ORGANIZATIONS. IT IS A TRAVESTY THAT WHILE MANY LEADING CITIES HAVE PROVIDED THEIR OWN WAYS AND MEANS IN CIVIL DEFENSE THE SEAT OF THE GOVERNMENT OF THE UNITED STATES SHOULD BE DEPRIVED OF AN ADEQUATE CIVIL DEFENSE PROGRAM BY REASON OF THE APATHY OF THE CONGRESS.

Herbert P. Ramsey

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* See "The Medical Profession and Preparedness" in September, 1950 issue, page 519.

Editorials

BLOOD PRESSURE STUDY IN PERSONS 65 AND OVER

The evaluation of blood pressure in old age has become a major problem because of the growing number of older people in the United States and the paucity of data in these age groups. Millions of Americans are now 65 years of age or older. With the increasing life span, many more millions will be added within several decades. It is essential to know (1) the normal range of blood pressure as well as the lower limit of hypertension for each age group over 65 for both sexes, (2) whether the blood pressure continues to increase with age and to vary with sex in those who are more than 65 years old, and (3) whether the blood pressure is related to weight, or (4) to surface area, or (5) to height.

Attention Washington Physicians

Dr. Master has sent an urgent appeal, to be made through the columns of the Medical Annals, for the support of Washington physicians in this study. Filling out the questionnaires does not require much time and he believes many physicians will take the trouble to do so if they understand the importance of their coöperation. Questionnaires have been sent to only about 1 in 10 physicians. If others are interested, they may send a postcard to "Blood Pressure Study," 11 East 100th Street, New York 29, N. Y., and a questionnaire will be forwarded to them.

To seek answers to these questions, Dr. Arthur M. Master,* Director of the New York Heart Association and cardiologist at Mt. Sinai Hospital, New York, Mr. Herbert H. Marks, of the Metropolitan Life Insurance Company, and Dr. Harry L. Jaffe, New York, have undertaken a statistical study of the blood pressure in people who are 65 years of age and over. The investigation is sponsored by the organizations mentioned above. The American Medical Association has given aid to the project.

Since hypertension is so common and may lead to heart disease, the correct interpretation of blood pressure readings is of great importance, particularly because of the increasing number of people who undergo routine health examinations in the physician's office, in industrial plants and in public health studies.

Although previous blood pressure studies had indicated that the incidence of hypertension increased with age, the important influence of age by decade and sex on the normal blood pressure was not taken into account. As a result, an arbitrary figure, usually 150/90, was used as the upper limit of normal for all adults over 40. This resulted in an excessive incidence of hypertension. Therefore, the blood pressure in 74,000 gainfully employed persons up to the age of 64 was studied. The ranges of normal blood pressure for each decade and by sex were published in 1950. The upper limit of normal was higher for each age group than that previously used.

The relationship of hypertension to coronary artery sclerosis and occlusion, cardiac enlargement, valvular disease, calcification of the aorta, electrocardiographic abnormalities, hypercholesteremia and diabetes may have to be re-investigated in people over 65, as was recently done up to that age. It had generally been accepted that an etiologic relationship between hypertension and coronary artery occlusion exists in both sexes. However, using the limits of normal blood pressure newly established for those under 65, it was shown that such a causal

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* Dr. Master spoke recently at the District Medical Society's 24th Annual Scientific Assembly on "The Role of Effort in Coronary Artery Occlusion and Coronary Insufficiency."

Opinions expressed in contributions to the Editorial Section are those of the writers and do not necessarily reflect the views of The Medical Society of the District of Columbia.

relationship exists only in women; in men, no important relationship between hypertension and coronary artery occlusion was found. Using the new limits of normal blood pressure, it was also found that enlargement of the heart occurred not uncommonly in men with coronary artery occlusion when their blood pressure had been normal. It was concluded that coronary artery disease alone could produce cardiac enlargement in men. Women with coronary artery occlusion, on the contrary, rarely developed cardiac enlargement if their blood pressure was normal. Hypertension, therefore, appeared to be a very important factor in the production of enlargement of the heart in women.

For the previous study of people 16 through 64 years of age an excellent source of material was found among the larger industrial concerns. Therefore, for the study of the normal blood pressure in people 65 years of age and older, in 1951–2 a pilot study was conducted in such concerns to determine their availability for data in these age groups. It was found that industry was not a suitable source because (1) relatively few persons 65 or older were employed (most concerns retire their employees at 65); (2) half of these companies discharged workers whose blood pressures were beyond an arbitrary, fixed limit which varied from 140/90 to 230/130; and (3) the technics employed in obtaining blood pressure readings varied tremendously.

Old age homes also proved unsuitable for the study because only scanty blood pressure data were available. It was therefore decided to seek the aid of doctors, between the ages of 30 and 60 years, geographically distributed throughout the country, in order to obtain the data required. General practitioners, part-time specialists (i.e., practitioners with a specialty), and full-time specialists in internal medicine and cardiovascular diseases were to be asked to coöperate in the investigation. The number of doctors to be contacted in each state was determined in accordance with the number of its inhabitants over 65. Through the coöperation of the American Medical Association, the required number of names of physicians in each state was obtained. Printed questionnaires were recently sent to 17,000 physicians.

The questionnaire card was made as simple and as clear as possible. It can easily be completed by the insertion of the figures requested, and by check marks in the "yes" and "no" columns. The data on the cards will lend themselves to facile transfer to "punch" cards, and to subsequent statistical analysis on International Business Machines.

Each of the 17,000 physicians was requested to fill out the questionnaires for 6 newly examined persons: 2 in the 65 to 69 year group, 2 in the 70 to 74 year group, and 2 above the age of 75. It was suggested that 1 of the latter be 80 years old or over, if possible. The subjects were all to be in fairly good health and not bedridden, although they might have some chronic illness. Those able to do part or full-time work were particularly desired. If they were well at the time the blood pressure was obtained, people with rheumatic heart disease, chronic coronary artery disease, or hypertension could be included. The most suitable subjects, therefore, were patients coming for routine examination and relatives or friends in the desired age group.

The persons whose blood pressures will be recorded and analyzed are geographically distributed throughout the country, in accordance with the distribution of those who are 65 and older. This is important, since the blood pressure level seems to vary with race and geographic location. Thus, people in tropical and subtropical climates appear to have lower blood pressures, and the incidence of hypertension among them is low.

In earlier studies of gainfully employed persons between the ages of 16 and 64 the absolute and relative variations in blood pressures, as measured by the standard deviation and the coefficient of variation, were found to increase with weight, particularly after the age of 40 years. The greatest contrast in the mean pressures was found in the older age groups. It will be of interest, then, to study the weight of even older people, i.e., those over 64 years of age.

In analyzing the measurements of such a variable physiologic function as the pressure of the blood, difficulties are encountered because exact figures cannot often be obtained. However, all precautions possible have been taken to round out the blood pressure readings, which will be recorded with care, to the nearest even digit. Physicians in this country usually record readings with terminal zeros and eights, but this was guarded against. In previous studies in each age group of both sexes, the frequency distribution of the blood pressure levels yielded a fairly normal curve. It is hoped to obtain results at least as good in this newly undertaken research project.

Definitions of "hypertension" among the older age groups will, of course, be established. In addition, the incidence of "hypertension" in these age groups according to various old criteria will be computed. It must be emphasized that the new limits of hypertension will have to be correlated with the entire clinical picture.

ACUTE RENAL INSUFFICIENCY

Acute renal insufficiency is not an uncommon problem in a large metropolitan area. Some confusion has surrounded an understanding of this clinical entity, which has been perpetuated by the variety of names under which it has been described (e.g., anoxic nephrosis, lower nephron-nephrosis, acute tubular damage, shock kidney, traumatic anuria, ischemuric episode, transfusion kidney, crush syndrome, toxic nephrosis, *ad infinitum*). A unified concept of acute renal insufficiency has developed out of the monumental study of Dr. Jean Oliver[1] and the understanding of the pathologic physiology which has come from clinical experience and the use of the artificial kidney. It is conceived as toxic or anoxic damage to the integrity of renal tubular cells, with the consequent loss of their ability to perform osmotic work and thus to modify the glomerular filtrate. Symptoms develop when the metabolic load of the individual exceeds the total functional capacity of these damaged nephrons.

The cause of such renal failure falls into three categories. The first is characterized by severe circulatory collapse, "shock," or a shock-like state. It is seen with trauma, especially that producing massive tissue necrosis or multiple fractures, and head injuries; obstetrical and surgical disease accompanied by profuse hemorrhage, such as in placenta previa, premature separation of the placenta, ectopic pregnancy, duodenal ulcer, and direct injury to blood vessels; severe anoxia, as in smoke inhalation and some anesthetic situations; and carbon monoxide poisoning or extreme fluid loss, as in infantile diarrhea and intestinal obstruction. The second type is characterized by pigment excretion in conjunction with some degree of circulatory failure, as encountered in the crush syndrome of Bywaters[2, 3]; the hemolytic episode as seen in blood transfusion reactions, transurethral prostatectomy, icterus neonatorum; heat stroke; burns; hemoglobinurias; black water fever; hemorrhagic fever, and sickle cell crisis. The third form is characterized by exposure to directly nephrotoxic substances or sensitizing agents. This is seen in poisoning by heavy metals, such as mercury, bismuth, uranium, and phosphorus; organic compounds, such as carbon tetrachloride, alloxan, cresol, uric acid, mushroom, and black widow spider poisons; crystallization from, or sensitivity to sulfonamide drugs; toxicity of antibiotics and infectious agents, such as leptospira, staphylococci, meningococci, etc.

Since establishment of the renal service at Georgetown University Hospital, 23 external hemodialyses have been performed on 17 patients with acute renal insufficiency. Many times this number have been managed by conservative therapy. Four anuric patients were of undetermined etiology. The remainder are scattered throughout the causes listed above. Postobstetrical and transfusion reactions have been the most common etiology in recent months. While a high percentage of such patients developed acute renal insufficiency by accidental and unavoidable causes, there is opportunity to employ preventive measures in order to reduce the incidence of this disease. Such measures would include relentless caution in the preparation and administration of blood transfusions. There should be unequivocal orders to stop the inflow of blood in any person suspected of having a reaction. From a practical viewpoint this means, for the most part, increased nursing and professional attention in the beginning of the transfusion, and hematocrits or some other technic of detecting hemolysis when transfusions are given to heavily sedated or anesthetized patients. In such situations the ordinary clinical manifestations of a reaction may be masked. In obstetrical conditions, such as placenta previa and premature separations in which bleeding might be anticipated, adequate blood should be available in order to avoid prolonged shock. The use of distilled water for bladder dilation for transurethral prostatectomy should be avoided. The prevention of toxic exposure to carbon tetrachloride lies chiefly in enforcement of industrial health measures and education of persons in the cleaning industry or other situations where exposure to this problem is commonplace. Those who cannot avoid its use should be taught the grave consequences of the association of alcoholism with this compound.

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The use of mercurial diuretics in the presence of acute renal disease should be avoided. Prevention of exposure to other nephrotoxins is largely a matter of testing new compounds in common use, enforcing adequate public health regulations, and educating potential victims of such compounds.

At the earliest recognition of the clinical features of acute renal insufficiency a good régime of conservative treatment should be instituted. The physiologic principles and technics of conservative therapy have been detailed in an article[4] which appeared in the October issue of MEDICAL ANNALS. As soon as it is apparent that oliguria will be prolonged beyond the interval of safety provided by conservative measures, such patients should be prepared for the use of substitution technics such as the artificial kidney. Quickly available and accurate laboratory support is a *sine qua non* for the successful management of such patients through the maze of their potential complications. It is interesting that "renal services" employing technics such as the artificial kidney have contributed most to the improvement in conservative therapy. Thus, the percentage of patients dialyzed has decreased with increasing experience. In this respect the artificial kidney is like any good doctor—working hard to put itself out of business.

GEORGE E. SCHREINER, M.D

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A FALSE STATEMENT

"TB is licked. . . ."

That's a statement I have been hearing more and more these recent years. And, believe it or not, I've heard it from members of our profession as well as from laymen.

It continues to surprise me, and I think it's a dangerous thing—this fallacy of permitting a falling tuberculosis death rate to give the people a false sense of security, particularly since a comparable decline is not to be found in the rate at which tuberculosis is striking.

I have been connected with the work of the District of Columbia Tuberculosis Association over a period of five years. I am well aware that the primary purpose of this group, along with 3,000 other TB Associations throughout the United States and our possessions, is education, but if the complacency regarding the no. 1 infectious disease killer in this country continues, I sincerely believe my Association, as a part of the great voluntary group to stamp out tuberculosis, is failing.

Take the situation in Washington.

A half century ago, when your local TB

Association was organized, tuberculosis caused more deaths in the city than any other disease. Since then the TB death rate has been cut 90 per cent. From no. 1 killer, tuberculosis is now seventh on the list here. Yet, 4 deaths occur here every week from this disease.

I think a recent statement from the World Health Organization is pertinent. It has to do with the decline in the tuberculosis death rate throughout the world since the end of World War II—"one of the most sensational developments ever recorded in the field of public health." Although there are still vast areas where reliable records are not kept, WHO reports that available figures show the mortality from respiratory TB has declined about 50 per cent. In Sweden the decline was 68 per cent, in Norway 60 per cent, in France 48 per cent, and in the United States 47 per cent. No particular cause is assigned as the reason for this victory, but WHO notes that declines in the rate were greatest where most energetic action was taken to combat TB.

It is my opinion that one of the main causes of this decline in the TB death rate was the introduction of mass radiography, which was first made available to the general public after World War II. This is responsible for the great increase in new TB cases discovered throughout the country.

The chest X-ray surveys which have gone on in cities, towns, and villages in the United States during the last few years have resulted in finding TB cases in the early stages. Early diagnosis means an easier cure. Often, when a symptomatic patient reports to his physician or to a clinic, his case is advanced and sometimes incurable.

Last year, 350,000 Washingtonians had chest X-ray films made. Five new cases were discovered here every day, the largest number of new cases found in the city in any year since the 1948 city-wide Mass X-ray Survey.

As an aside, I would like to point out that case-finding programs conducted here during recent years have turned up an interesting fact. Tuberculosis is being found more in the older-age groups, particularly males. I believe the medical profession in Washington can be of great assistance in the city's program of TB control by insisting that patients in this group have chest X-ray films made. TB is no respecter of age. It can strike anywhere.

The fast-tempo X-ray survey program is the core of tuberculosis control. Yet within the last few months funds for the maintenance of mobile chest X-ray units have been completely eliminated from the U.S. Public Health Service budget. In the past, surveys have been carried on in Washington by the TB Association and the D.C. Health Department, with the Public Health Service furnishing the mobile unit. Dr. Daniel L. Seckinger, Director of Public Health in the District, has called tuberculosis "Washington's worst health problem." The seriousness of curtailing a program of chest X-ray checks in the community is obvious.

As you know, the proceeds of the annual Christmas Seal Sale, beginning this year November 16, are the sole support of the D.C. Tuberculosis Association. It is hoped that the generosity of Washington residents will make possible the continued program of the Association—education, research, rehabilitation—all vital tools in the fight against tuberculosis.

But here lies our challenge: The Association must carry on the chest X-ray program in the city. A successful TB campaign this year means that part of the Seal Sale proceeds will go toward the maintenance of a chest X-ray mobile unit, which is being made available to this area by the Public Health Service.

I speak as president of the D.C. Tuberculosis Association. We will continue to use all of our resources to promote and protect the health of our community.

R. LOMAX WELLS, M.D.
President, D.C. Tuberculosis Association

In and Out of Focus

BY THE OBSERVER

The Twenty-Fourth Edition

From the standpoint of attendance, the 24th ANNUAL SCIENTIFIC ASSEMBLY was an unqualified success. Although the point can be made that attendance of itself is not indicative of the quality of a scientific meeting, the fact remains that without participation of large numbers of physicians the present ASSEMBLY would soon cease to exist. It is of course a disappointment when the scientific program does not measure up to the high standard which participating physicians have come to expect. When this happens, the meeting sags badly, despite a large registration.

Your Observer can recall meetings where attendance was excellent but little interest was shown in scientific sessions. Most of those attending were content to wander through the exhibits and view the motion pictures. This has not been true of the ASSEMBLY, whose scientific programs are widely known for their excellence.

It is a pleasure for your Observer to report that this year the scientific program and exhibits measured up to the best the ASSEMBLY has offered in the past. Proof of this was the generally well-filled Presidential Room and the crowded Round Table Discussions. Your Observer looked in on meetings at frequent intervals and was much elated by what he saw.

The point of this is that if over-all attendance is properly evaluated, it has considerable bearing not only upon the success of the ASSEMBLY but on its standing as a scientific meeting. Here then is the breakdown of registration for 1953:

Members	1,024
Guest Physicians	791
Dentists	12
Pharmacists	24
Nurses	222
Medical and X-ray Technicians	121
Public Health Exhibitors	95
Technical Exhibitors	244
Medical Students	356
Miscellaneous	363
TOTAL	3,252

There were several 'firsts' at the recent ASSEMBLY. Outstanding was the participation of officers and members of six State Chapters of the American Academy of General Practice. The officers of the chapters present at the opening-day luncheon of the ASSEMBLY were: Dr. Amos N. Johnson, President of the Maryland Chapter; Dr. Carl B. Hall, President of the West Virginia Chapter; Dr. Charles K. Rose, President of the Pennsylvania Chapter; Dr. J. Jesse Selinkoff, Chairman of the Education Committee of the Delaware Chapter; Dr. John R. Bender, Secretary-Treasurer of the North Carolina Chapter; Dr. Horace W. Eshbach, Secretary-Treasurer of the Pennsylvania Chapter; and Dr. Halvard Wanger, Secretary-Treasurer of the West Virginia Chapter.

The three-dimensional motion picture, "A Preliminary Demonstration of 3-D Cinefluorography" produced by Drs. G. H. Ramsey, J. W. Watson, Jr., and Sidney Weinberg of the Department of Radiology, Strong Memorial Hospital, and the University of Rochester School of Medicine and Dentistry, was given its initial showing in Washington during the ASSEMBLY. The film was made available through the courtesy of Charles Pfizer and Company, Incorporated. As expected, there was a great deal of interest in this picture, your Observer noting that there was always a considerable number of physicians waiting for admission.

The first dinner given for doctors' office assistants was enthusiastically received by some 450 nurses, technicians, secretaries, and receptionists. In Dr. W. W. Bauer, Director of the Bureau of Health Education of the American Medical Association and Editor of *Today's Health*, the Committee on Arrangements had obtained an ideal speaker for such an occasion. Dr. Bauer was at his best, which is very good indeed. His subject "Patients and Impatience" could not have been more appropriate. There was only one other speaker, Mrs. Berkeley M. Sitrick, R.N., the subject of her brief talk being the opportunities for self-improvement available to secretaries. She too made a fine impression. The doctors' chorus under Dr. Robert H. Harmon was a great hit. All in all, it was a gala event and one which will undoubtedly have to be repeated.

The Annual Dinner, as always, brought the ASSEMBLY to a close. The principal speaker was the dynamic and articulate President of the American Medical Association, Dr. Edward J. McCormick. This was his first appearance before a medical group in Washington. His subject, "The Future of America and the Future of Medicine," provided him with the opportunity to do some straight from the shoulder talking about the accomplishments of the AMA and the individual doctor's responsibility.

Some 400 persons signed up for the special White House Tour which had been arranged some weeks previously. The Woman's Auxiliary gave a tea at the Medical Society's building for visiting physicians' wives and new members. The tea, your Observer has been informed, was very well attended.

Finally, the Public Health Exhibit had been doubled in size thanks to the financial support given by sponsors, including Peoples Drug Stores, which participated in this role for the first time. Those who viewed the Exhibit must have noted the improvement in the quality of displays.

These then were the new features of the ASSEMBLY, and of course the regular ones were maintained at their usual high standard of excellence.

Mention should be made of an unusual event which preceded the ASSEMBLY; on September 29, officers of the Society and the General Chairman and chairmen of committees for the ASSEMBLY were received at the White House by Mrs. Dwight D. Eisenhower. It had been hoped that a tea could have been arranged for physicians' wives but this was not possible and the reception was suggested as a compromise.

Members of the Society have long been aware that Dr. Herbert P. Ramsey, this year's president, is an unusually gifted speaker. He talks with such ease that to the listener it seems no chore at all. The fact is, however, that when one presides at five different functions in three days, makes three TV and one radio appearance, besides being guest of honor at several social functions, he has, as the saying goes, "had it." Despite Dr. Ramsey's relaxed manner and long experience in this sort of thing, he, like anyone else, becomes weary, although he rarely shows it.

Aside from the three-day marathon, Dr. Ramsey put in an unusual amount of time in laying the plans for this year's ASSEMBLY. Throughout many months preceding the meeting he worked closely with the Committee on Arrangements.

Dr. Jonathan M. Williams, General Chairman of the ASSEMBLY, did a splendid job. He was exceptionally well qualified, possessing the imagination, executive ability and drive required. He had support from the chairmen of various committees: Dr. Bernard J. Walsh, Program; Dr. William E. Bageant, Exhibits; Dr. Karl C. Corley, Attendance; Dr. Francis X. Courtney, Finance; Dr. Roy L. Sexton, Radio, Television and Motion Pictures; Dr. Montgomery Blair, Jr., Social Affairs; and Dr. Helen Gladys Kain, Women Physicians. Dr. Williams also had the close coöperation of the administrative staff of the Society's Executive Offices.

Now that the 1953 ASSEMBLY is history, work has begun on the 1954 meeting, which will be unique in the Society's history. It will be known as The First Interstate Scientific Assembly and will be sponsored jointly by the

Medical Society of the District of Columbia and the Medical Society of Virginia. It is scheduled to be held at the Shoreham Hotel on November 1, 2 and 3, 1954.

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This Year's Awards

Until 1941 the Medical Society presented certificates to members chosen for recognition at infrequent intervals. Since then, awards have been made annually except for the years 1946 and 1947. This has stimulated considerable interest in the probable recipient or recipients and ceremonies attendant upon their presentation.

DR. HERBST AWARDED CERTIFICATE OF MERIT

Dr. William P. Herbst (left) received the Medical Society's Certificate of Merit from Dr. Herbert P. Ramsey (right), President of the Society, at the Society's Annual Banquet, October 7, in the Presidential Ballroom of the Hotel Statler. In the center is Dr. Edward J. McCormick, President of the American Medical Association, who delivered the main address on that occasion.

Dr. Herbst was presented the certificate "in grateful acknowledgment of his service to the medical profession and to the people of the District of Columbia. Ever conscious of the high ideals to which physicians subscribe, he has devoted himself untiringly to maintaining high standards of medical practice, easing the financial burdens of the sick, and disseminating health information among the laity. It can be truly said of him that he has not only served his profession and the community with distinction but far beyond the call of duty."

Genuine satisfaction was expressed by members of the Society when it was announced that Dr. William Parker Herbst was to receive this year's Certificate of Meritorious Service, for Dr. Herbst is one of the District's most vigorous and forward-looking medical leaders, and, as the certificate given him states, he has "not only served his profession and the community with distinction but far beyond the call of duty."

Dr. Herbst was President of the Society in 1946 and Chairman of the Society's Executive Board in 1951. He was a member of the Board before and after its reorganization in 1939. Few members of the Society have served on as many committees as he. At present,,he is Chairman of the Committee on Public Policy and a member of the Committee on Cancer Control.

During the long period in which he has served the Society, Dr. Herbst has also been active in a number of other organizations, most of them in some way engaged in health activities. He was one of the organizers of Washington's Blue Shield Plan, Medical Service of the District of Columbia, being a member of its first Board of Trustees. Since 1950 he has been the Service's First Vice President. He is President of the Social Hygiene Society of the

District of Columbia, a post he has held for several years, and a member of the Executive Committee of the District of Columbia Survey of Medical Care of the Indigent and Related Services.

In his specialty of urology he has had a distinguished career. He has been President of the Washington Academy of Surgery and the Washington Urological Society. He is a member of the Board of Trustees of the American Urological Research Foundation, and of the governing board of the Committee on Post-Graduate Urological Education of the American Urological Association.

Considering his long and loyal service to the Medical Society, his profession and the community, few physicians have been more deserving of recognition by their fellows than 'Bill' Herbst. However, Bill is more than an able physician. His friends will tell you that his outstanding personal qualities are kindness, loyalty and unimpeachable integrity.

MEDICAL SOCIETY'S SECRETARY RECEIVES SPECIAL AWARD

THEODORE WIPRUD (right), Executive Director and Secretary of the Medical Society of the District of Columbia, has just received the Medical Society's Special Certificate from PRESIDENT HERBERT P. RAMSEY. Mr. Wiprud completed 15 years of service with the District Medical Society on June 1, 1953. The certificate was presented to him at the Society's Annual Banquet, October 7, "in recognition of his more than twenty-five years of service to American medicine and, in particular, of his fifteen years of steadfast devotion to the medical profession of the District of Columbia;

"And in further recognition of his accomplishments as an able administrator and author-editor; a teacher; a leader in civic life; friend of physicians;

"And in special and grateful appreciation of those moral and spiritual qualities that have characterized all his achievements—loyalty, sympathy, wisdom, unselfishness, and unsurpassed honesty."

Your Observer still finds it difficult to express his feelings as the recipient of a special certificate in recognition of his services to the Society. Perhaps it is best that he not attempt to do so. To say that it was one of the unexpected events of his life is an understatement. It was in fact an occasion he will always remember with deep emotion since it pointed up as fine a relationship as any man has ever had with an organization. As he said when the award was given him, he has served the Society for many years and he hopes he will have the privilege of doing so for a number of years to come.

The final award, also in the form of a certificate, later to include a bronze medal now in the process of being designed, was new. Upon recommendation of the Committee on Public Information, it had been named in honor of one of Washington's most eminent physicians, John Benjamin Nichols, now in his eighty-sixth year. The award, it was agreed, should be given to the lay person or lay organization, or both, who have made outstanding contributions to the better-

FIRST NICHOLS AWARD TO VARIETY CLUB

Mr. Victor J. Orsinger, Chief Barker of the Variety Club, Tent No. 11, has just received the first John Benjamin Nichols Award from Dr. Josephine Renshaw, Chairman of the Medical Society's Committee on Public Information. The Variety Club of Washington was cited "for contributions in the health field and distinguished service to the people of the District of Columbia" at the Society's Annual Luncheon in the Presidential Ballroom of the Hotel Statler, October 5, the opening day of the 24th Annual Scientific Assembly.

ment of the health of the people of the District of Columbia.

The first recipient of this award was the Variety Club of Washington. It was presented at the opening day luncheon of the 24th Annual Scientific Assembly to Mr. Victor J. Orsinger, the Club's Chief Barker, by Dr. Josephine Renshaw, Chairman of the Committee on Public Information.

Among the Club's many contributions to the improvement of health facilities in the District have been the following: a pledge of $115,800 to Children's Hospital for an outpatient clinic which can handle 92,000 patient visits a year; a new ambulance for Emergency Hospital; $2,500 to Episcopal Hospital for a Medical Social Service worker for the glaucoma clinic; $1,500 to the Community Chest; $2,000 to the Metropolitan Police Boys' Club; $1,500 toward nurses' quarters at the Hebrew Home for Aged; and first-run movies for the Florence Crittenton Home, District Training School, Freedmen's Hospital, Glenn Dale Sanatorium, Industrial Home School of Blue Plains, Masonic Home, and Junior Village (D. C. Home for Children).

In receiving the award, Mr. Orsinger expressed the gratitude of his organization and their surprise when informed of the organization's selection for the award.

Dr. Renshaw announced that the Nichols Award will not be given annually unless there is a recipient found worthy of it. The creation of this award not only marks a departure from precedent but inaugurates what your Observer believes is a new era in the Society's relations with the public.

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Election Procedure

As a nominating committee must be elected within the next three months, it occurred to your Observer that the method by which the committee is chosen, its functions, and the manner in which officers are elected might profitably be reviewed.

The present procedure was adopted by the Society in 1943 because of dissatisfaction with the haphazard method previously in effect. For many years officers had been nominated and elected at the Annual Business Meeting. Not infrequently there was a questionable quorum of voting members present. Many of these left immediately following the election of the President, not realizing that some of the remaining offices to be filled were just as important. The Executive Board finally recommended the procedure which is outlined here, so that every member would be given an opportunity to exercise the privilege of the ballot by voting for a representative nominating committee. Equally important, an elected committee would give careful and unprejudiced consideration to the selection of nominees.

The President sets the election procedure in motion when, subject to the approval of the

Executive Board, he selects the 21 members whose names are to appear on the ballots for the election of the Nominating Committee. He is naturally most anxious that these members be representative of all sections and medical groups in the District and he goes over the membership roster many times before coming to a decision.

Following Board approval, ballots are sent to all Active and Life members with the request that they be returned on a specified date in a plain envelope enclosed for this purpose. Shortly before the date on which the ballots must be returned, tellers are appointed by the Chairman of the Board. They count the ballots and report to the Board the names of the seven nominees who, having received the highest number of votes, will constitute the Nominating Committee.

Each member of the newly elected Committee is notified by the Chairman of the Board of his election, names of the other members of the Committee being withheld. In fact, members of the Committee seldom learn who the other members are until they arrive at the meeting where nominations are decided upon. Under these circumstances Committee members approach their task uncommitted and with an open mind.

No officer of the Society attends the meeting of the Nominating Committee nor does he discuss the selection of nominees for office with any of its members. Instructions as to the nominating procedure, copies of the Society's Constitution and By-laws, membership rosters, and lists of present and past officers are left on the table in the room where the Committee meets for the information of each member.

The nominations having been decided upon, they are given to the Secretary of the Society for submission to the Executive Board. The Society is also notified of the result of the Committee's deliberations prior to the March Business Meeting, which is held on the first Wednesday of that month, when nominations must be made.

The Committee selects one nominee for each office, but members are notified that they are privileged to nominate candidates for any office from the floor. They are also informed that the Society's Constitution and By-laws provides that all nominations must be made at the March meeting.

In this connection, there is also a provision in the Constitution and By-laws that "in case of withdrawal, incapacity or death of any nominee proposed in accordance with this Article, alternative nominations for the office involved may be made immediately before the election of officers" (Chapter VI, Article II).

As previously stated, the election of officers is held at the Annual Business Meeting. If there is more than one nominee for any office, those present who are eligible to vote do so by ballot; otherwise balloting is dispensed with and a motion to elect is in order. Unfortunately, attendance at Annual Business Meetings is still not what it should be, but at least the nominees submitted by the Nominating Committee have been carefully selected on the basis of their qualifications for the various offices in the Society.

It seems to your Observer that the election procedure now in effect is fair, democratic and efficient. He has heard very few informed voting members of the Society discuss this subject who do not concur in this view.

When you receive your ballot in January, be sure to vote for your choices for the Nominating Committee.

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Who Pays the Doctor?

There is no desire on your Observer's part to minimize the value of public relation programs. Generally speaking, he believes they are worth the effort and money invested in them. Some medical organizations, in his opinion, have gone too far, expending more funds for this purpose than can be justified. An enthusiast for the extravagant type of public relations program gives the impression that if only enough money and talent are made available, medicine's ills can be cured. Nothing can be further from the truth.

Let us be honest about it. The problems of medicine are basically of an economic nature. They stem from the demands of people everywhere for financial security. Along with financial security they insist upon an even higher standard of living as one of the fruits of the mass production era.

Undoubtedly, sound public relations programs do create a more sympathetic attitude toward the position taken by the medical profession in regard to mitigating the costs of medical care. However, they will not, in your Observer's opinion, alter or eliminate the objectives previously mentioned.

Examples which come to mind confirm these conclusions: the current drive for broadening of Social Security benefits; the demands of organized labor not only for increased wages but for broader welfare programs; and more recently the report on the Annual Survey of Accident and Health Coverage in the United States sponsored by the Health Insurance Council, representing nine associations made up of insurance companies writing protection against hospital, surgical, medical costs, and the loss of income due to disability. The report is significant not only to physicians now in practice but especially to those who will succeed them. It has been apparent for some time that in the foreseeable future most medical bills will not be paid by patients but by various types of prepayment plans, insurance companies, and local, state, and Federal governments. The Council's findings bear this out.

"Nearly three out of five persons in the entire population of the United States," the report states, "are now protected through voluntary programs against the costs of hospital care in the event of accident and illness, representing the biggest single form of coverage in the field of health protection.

"The total number with this protection exceeded 91 million at the end of 1952, an increase of more than 5½ million, or 7 per cent, during the year. Back in 1941, when the United States entered World War II, the number of persons with voluntary hospital expense protection added up to slightly over 16 million, indicating the rapidity with which this form of accident and health coverage has grown."

"The second largest form of protection in the field of voluntary accident and health coverage is surgical expense protection. The total number of persons with this form of coverage at the end of 1952 totaled over 73 million. The increase during 1952 was more than 7½ million persons, or 12 per cent.

"Little more than a decade ago, in 1941, there were less than 7 million persons with surgical expense protection. A later development than coverage for hospital care, surgical expense protection has shown the more rapid growth over recent years.

"Most persons with surgical expense protection are covered either by insurance companies or by Blue Shield. In the event the services of a surgeon are needed, the protection provides payments in accordance with a schedule of fees fixing maximum reimbursement for each type of operation."

"Eleven years ago, at the end of 1941, it is estimated that there were only about 3 million persons with medical expense protection. By the end of last year, the number of persons with this protection had grown to nearly 36 million persons. Approximately 8 million more persons had medical expense protection at the end of 1952 than the year before, and the gain for the year was 29 per cent.

"By far the greatest part of medical expense protection is provided by Blue Shield, local medical societies, and insurance companies, and a wide range of benefits is available. The most common form of this coverage calls for the payment of benefits toward the expense of in-hospital calls by doctors for other than surgical treatment. Likewise available are other forms providing for comprehensive medical coverage of home, hospital and office treatment and examinations. In some cases, too, medical expense protection provides benefits for paying the cost of special laboratory, X-ray, and other examinations for diagnostic purposes."

The Council reports that of the 91 million persons protected against the costs of hospital care, 43 million were enrolled in the Blue Cross and medical society plans. The latter were out in front in medical expense coverage with some 18 million persons protected as compared to 15 million covered by insurance companies.

Not included in the above were many private and public agencies which paid practicing physicians for their services. Mentioned in the report are some 10,600,000 workers covered by the cash sickness plans in Rhode Island, California, New Jersey, and New York and the plans sponsored by the Federal Railroad Unemployment Insurance Act. It is estimated that three fourths of these workers were also protected under voluntary plans, from which it is deduced that the remaining 2½ million were protected by state and Federal Government.

Among other types of protection against costs of sickness listed were the Workmen's Compensation; disability benefits included in many life insurance policies; commercial accident policies; group accidental death and dismemberment insurance; medical care provided individuals in the armed forces, in many instances including their dependents; public institutions' medical care; medical care for veterans; protection under automobile and other types of personal injury liability policies; and medical payments provisions under many automobile, residence liability and other types of liability policies.

Physicians generally have only begun to feel the impact of this change in physician-patient financial relationships. If the trend continues, and there is every reason to believe that it will, the transition from individual to third party responsibility for medical bills will be complete or nearly so in surprisingly few years. If this conclusion proves correct, who will deny the profound effect it will have upon medical practice. After all, the individual, organization or institution which holds the purse strings is in a strong position to make demands on the medical profession. Medical men must face this fact realistically and exercise the highest order of statesmanship if medical practice in its best tradition is to survive.

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When a Reporter Calls

Some weeks ago a medical news 'story' appearing in a Washington newspaper provoked considerable criticism among physicians. It was apparent to your Observer that the doctor quoted in the article had had little experience with the press; that he was unfamiliar with the Society's recommendations relating to publicity; and that he had not taken into account the effect upon physicians of what he said. On the other hand, the reporter was obviously inexperienced or he would not have quoted the doctor in the way in which he did.

This incident of itself is not too important because it is the sort of thing which is soon forgotten. However, this happened to be one of a series of medical news 'stories' which have had an unfavorable accumulative effect upon quite a number of doctors. They have become impatient with their fellows who figure prominently in the news when, in their opinion, the publicity given them is unwarranted or in poor taste.

It is your Observer's belief that many doctors are too sensitive to medical publicity. There can be no reasonable objection to honest and objective reporting on medical matters, scientific or otherwise. There have been instances where a news 'story' was in questionable taste—not that the physician intended to affront his fellows, but largely due to his lack of knowledge about news gathering and what he should say to the reporter when he calls. It is this which prompted your Observer to write the following paragraphs in the hope that they will be helpful to some of his readers.

The first thing for the doctor to remember is that when the reporter calls he has been given an assignment. He must, if he wishes to hold his job, report facts, pleasant or unpleasant. Most newspapers expect him to be objective, but being human his observations are to some extent colored by his personal experiences and his attitude toward life in general. Even when the reporter leans over backward to be fair, the result may or may not be satisfactory to the person or organization whose activities he covers.

Most reporters require the assistance of the physician in translating technical medical news 'stories' into lay terms. They have not the training or background to evaluate scientific facts. There are, of course, competent science writers who do exceedingly well without assistance. However, most newspapers are not so fortunate as to have reporters well grounded in medical science, and the doctor's help is needed.

Wherever possible, the reporter endeavors to use names because 'names make news.' Here is where he runs into trouble, because most doctors are reluctant to have their names in the newspapers. This is understandable from the doctor's point of view because of the long-standing antipathy of the medical profession to publicity.

This had its beginning in days now fortunately past when patients looked upon medicine as a mysterious business too deep for the lay mind to grasp. Doctors did not discourage this belief; in fact, they gave it impetus. And so those daring physicians who got into print on medical subjects invited the term 'advertisers.'

The attitude of the medical profession today is quite different, although there are still those who shy from publicity of any kind and who are quick to condemn those who get it. Nevertheless, honest and accurate medical writing for lay consumption is generally accepted by the medical profession. Doctors naturally bridle at sensational medical reporting and those physicians who wittingly or unwittingly encourage it.

At this point it would seem that a few suggestions to doctors are in order. The first is to give the reporter a friendly reception. As stated in the beginning, he has a job to do. It is true that some are better qualified than others and deserve more consideration. Nevertheless, the doctor has everything to gain and nothing to lose by endeavoring to be helpful.

He should make up his mind at the beginning of his conversation with the reporter whether he wishes to be identified in the 'story' which is being written and, if so, whether he wishes to be quoted. It will not do to talk first and make the request not to be quoted later. That is not fair to the reporter, who has every right under these circumstances to ignore the request.

The doctor should not give an interview or permit his name to be used in connection with an article describing a scientific procedure unless it is original or for some valid scientific reason unique. Your Observer recalls that some years ago in a Midwestern state where he was formerly situated, a physician was widely publicized for an operation on an infant for an 'upside down' stomach. The fact was that this operation had been performed before many times by other skilled surgeons. Naturally, the doctor came in for considerable criticism.

Even where the release of scientific information seems justified, the doctor is wise to communicate with his medical society before it is publicized. This suggestion is not offered to afford the society an opportunity to censor the doctor's statement or the facts to be included in the news release but to help the physician and the reporter to avoid pitfalls which may not be apparent to them.

In this connection, the doctor who is interviewed and who has decided to make a statement should consider not only the medical ethics involved but whether it is in good taste and in accordance with the traditions of the community in which he practices.

Once an interview is agreed upon, the doctor should be frank. Evasiveness destroys confidence and it is better to remain silent than to talk around a subject.

With very few exceptions reporters can be relied upon to keep a confidence. In fact, in your Observer's experience he cannot recall a single instance in which a reporter has disclosed confidential information.

Returning for a moment to the use of the doctor's name, this is the most controversial aspect of the physician-press relationship. The subject has come up many times in meetings between newspaper editors, reporters and physicians. During the recent ANNUAL SCIENTIFIC ASSEMBLY, an unusually able reporter on medical subjects suggested that the Society's Committee on Public Information be requested to arrange another conference in which city editors, reporters and members of the Society would participate to discuss this matter. Your Observer concurs in this proposal. But whatever this group does in this and other matters pertaining to publicity, satisfactory relations with the press depend more than anything else on how doctors individually deal with the reporters.

T. W.

MILE POSTS TO HEALTH

The District of Columbia Survey of Medical Care for the Indigent and Related Services*

MENTAL HEALTH

This is a brief summary of the mental health survey which was part of the over-all community evaluation of medical care in the District of Columbia, consisting of 29 pages, plus five appendices. It was completed by a committee of 55 persons representing a cross section of professional and lay individuals. The point of departure for the survey was the assumption that in any community mental health objectives are: (1) development of long-range community programs to promote good mental health through agencies such as the Health Department, schools, youth and recreational organizations, churches, hospitals, etc.; (2) case finding, early recognition, diagnosis, treatment, and prevention of emotional disturbances; (3) availability of adequate mental health clinic and hospital facilities; (4) a continuous well-planned training program in mental health for professional and lay persons who have an opportunity to influence the mental health of others; and (5) the constant evaluation of the efficacy of methods, plus scientific research in the field of mental health.

Children and youth in trouble constitute one of the most disturbing problems facing the community, because from this group comes a large proportion of delinquents and criminals. Figures indicate that there is a continuing upward trend in the commission of antisocial acts by children. The survey pointed up the obvious—that the agencies working with these problems are too understaffed or too ill equipped to cope with its magnitude. The survey further pointed out that there are at least 25,000 other children not yet delinquent who either are emotionally disturbed or living in situations known to be fertile soil for emotional upsets. Mental health services in the schools are not available either to prevent or refer early cases of emotional disturbances for treatment. The maximum use of meager facilities available in the District of Columbia is an insufficient answer to the obvious size of the needs and the readiness of the people who want to use them. There are practically no satisfactory facilities for acutely disturbed children and practically no facilities to meet the educational and mental health needs of mentally retarded children.

Relative to the adult psychotics, the facilities at Gallinger Hospital are entirely too overcrowded and deficient in terms of plant, equipment, personnel, and administration. The increasingly overcrowded conditions at St. Elizabeths Hospital, magnified by the burden of providing domiciliary care for the psychotic aged, are endangering services to the mental patients more responsive to treatment. The preventive and treatment facilities within the District for persons not requiring inpatient hospital care for emotional disturbances are scarce. There is insufficient coördination between inpatient and outpatient services for mental patients. The value of hospitalization is frequently lost because of undeveloped facilities for the aftercare of mental patients.

Programs in all the District agencies, public and private, must be developed further so that they can assume appropriate and coördinated responsibility for more diagnostic, treatment, educational, and consultative mental health services. The survey pointed out that there are few such services available to any courts that try adult offenders or to the three correctional institutions in the District of Columbia. Treatment facilities for persons placed on probation are practically nonexistent. The need for mental health services for the Negro population should receive careful study.

RECOMMENDATIONS OF MENTAL HEALTH SURVEY COMMITTEE

SUBCOMMITTEE ON CHILDREN AND YOUTH IN TROUBLE

1. Attention to the attitudes and behavior patterns frequently developed in slum areas as well as to the conditions which further those attitudes and behavior patterns, and to the problems of parents, teachers in overcrowded and understaffed schools, and children without adequate recreation.

2. Additional trained personnel, equipment, and a functional type of building for the Juvenile Squad and the Women's Bureau of the D. C. Police Department.

3. Increased treatment services available to the Juvenile Court for emotionally disturbed children.

4. Residential psychiatric facilities for observa-

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* Abbreviated portions of the report of the Survey have been appearing in the MEDICAL ANNALS OF THE DISTRICT OF COLUMBIA from month to month. This is the sixth installment.

tion and long-term care of children needing such services.

5. Educational program on the emotional problems of children for school teachers, social workers, recreation workers, doctors, nurses, police officers, and others.

6. Attention to the special problems of remedial education for children who have learning disabilities, especially those who are not yet in trouble.

SUBCOMMITTEE ON NONDELINQUENT CHILDREN

1. Immediate attention to the large number of children in urgent need of psychiatric care and other forms of mental health services.

2. Increase the available mental health clinic facilities for the care of children.

3. Modern children's psychiatric center for seriously disturbed children, Negro and white.

4. Expansion of the facilities and staff of the District Training School. Top priority should be given to a new infirmary cottage, and to adequate security conditions for those who need them.

5. Expansion of the extramural care program of the District Training School and establishment of such a service for non-committed children.

6. Residential facilities for the less disturbed child who requires a relatively brief separation from home for observation and treatment.

7. Better pre-service and in-service mental health training for school personnel.

8. Recognition of the need for psychiatric services within the school system.

9. Expansion of facilities for the care of mentally defective children in the community.

10. That the Board of Public Welfare in coöperation with the Health Department develop an adequate mental health program to include diagnostic, treatment, and preventive services.

SUBCOMMITTEE ON PSYCHOTIC ADULTS

1. Immediate construction at Gallinger Hospital of a modern, 200-bed psychiatric building, and pending this construction, increase in trained personnel and improvement in administration.

2. A program for care of psychotic aged outside of mental hospitals with the development of intermediate facilities and supervised home care.

3. An effective and coördinated program of aftercare for mental patients including extramural treatment, vocational rehabilitation, and supervised home care.

4. Increased personnel and expansion of total bed capacity for St. Elizabeths Hospital.

5. Reëxamination of commitment laws and procedures, with a view to their modernization.

SUBCOMMITTEE ON NONPSYCHOTIC ADULTS

1. Expansion of trained staff and clinic quarters of the Bureau of Mental Hygiene.

2. Integration of the Alcoholic Rehabilitation Program with the Bureau of Mental Hygiene.

3. Expansion of trained staff and clinic quarters of the Washington Institute of Mental Hygiene.

4. Reëstablishment of the mental health clinic at Gallinger Hospital and establishment of eligibility standards to permit services to persons in the lower income bracket.

SUBCOMMITTEE ON ADULTS IN TROUBLE

1. Evaluation and treatment of offenders in all phases of their relationship with judicial and penal authority, i.e., apprehension, adjudication, incarceration, pre-release, and probationary.

2. Establishing a mental health clinic outside the court atmosphere to service the District and Municipal Courts in their probation program.

3. A psychiatric program in each of the larger prisons for prevention, diagnosis, and treatment.

4. Reëvaluation of the extremely heavy workload of the District Court probation staff.

Maternal and Child health

The Committee believes that certain administrative policies have tended to block good medical care for maternity patients and for children.

A. Policy on distribution of cases between Gallinger and the contract hospital
   1. The number of maternity beds available to Negroes is out of line with the need, and the volume of maternity work at Gallinger and Freedmen's exceeds the optimum level of bed occupancy.
   2. Children's Hospital Premature Unit generally operates below capacity, whereas the reverse is true of Gallinger's Premature Unit. However prematures born at Garfield or Columbia may only be admitted to Gallinger.

B. Policy on admission to a contract hospital in the interest of continuity of care

The present system allows free use of contract hospitals for outpatient care and for certain types of inpatient care. It provides for almost exclusive use of Gallinger for elective surgery. This prevents contract hospital staff physicians from carrying through into the inpatient stage on treatment they have started for children in their outpatient departments.

C. Absence of an administrative procedure that assures admission to Gallinger of a child referred by a Health Department well-child clinic; or that provides, where there are differences in medical judgment, for a review with the referring physician

D. Income, residence and other restrictions on eligibility

1. Many women actually living in the District but not meeting the technical residence eligibility requirements are now being admitted to Gallinger for delivery as emergencies. Many of these patients have had little or no prenatal care.
2. The policy that the residence of the child shall be taken to be that of the parents denies care to certain children who are living in the District but whose parents are not.
3. An unmarried pregnant woman applying to the Bureau of Medical Assistance is asked to bring the putative father to the Bureau for an interview before acceptance for prenatal care.

RECOMMENDATIONS OF MATERNAL AND CHILD HEALTH COMMITTEE

1. In planning a community medical care program, special consideration should be given to maternity care and care of children, for expenditures to promote the quality and availability of a wide range of health services for mothers and children are a long-run social investment for the community. Good maternity care pays off in terms of the future physical and mental health of both mother and child, as well as in terms of the prevention of fetal and neonatal mortality. In childhood there is a unique opportunity to prevent disease, defect and disability, and to promote a positive healthful state which will last into later life.

2. Good maternity and pediatric services can be developed satisfactorily only through community planning, in which leading specialists in obstetrics, pediatrics, and related disciplines participate.

3. Planning more maternity beds, particularly for Negroes, should be considered in relation to proposed new construction. The effect that an increase in the per diem reimbursement would have on the availability of maternity beds for Negroes should also be canvassed.

4. The possibility of decentralizing part of the maternity load to selected voluntary hospitals should be explored also. This decentralized plan should provide for prenatal, delivery, and postpartum care at the same facility; and policies should be established which will encourage patients to secure medical care as early as possible in the prenatal period. Arrangements should be made for securing all services needed for complete maternity and newborn care, including public health nursing, medical social homemaker, and educational services.

5. Further study should be given to the utilization of existing premature facilities, the need for additional ones, and the development of a community-wide premature program.

6. In the care of children, the policies should give consideration to the need for continuity of care. They should be based on a reasonable medical interpretation of this concept, and should take into account the accessibility of facilities.

7. The policies should make provisions for care of long-term, complicated cases in facilities selected on the basis of a professional evaluation of the clinical and social factors.

8. Coördination of preventive and curative services in the home, clinic, and hospital should be planned. The policies should assure prompt hospitalization of acutely ill children referred from Health Department clinics.

Eligibility should be determined in relation to a total plan of treatment, not separately for outpatient care, inpatient care, drugs, appliances, etc. The income standards should be realistically related to the economic condition of the people; and should allow for flexibility of administration so that such individual circumstances as the cost of the care needed could be taken into consideration.

Residence requirements also need to be reviewed in relation to the special problems presented by maternity and pediatric patients.

(Continued on page 638)

SUPPLEMENTARY REPORT OF THE EXECUTIVE BOARD*

As it is not the desire of your Board to encroach upon the very interesting program in store for you tonight this report will be extremely brief.

Major General Howard McC. Snyder Recommended for Election to Honorary Membership: The important facts in General Snyder's biography were presented at the Annual Business Meeting last May. It was pointed out then that General Snyder has had a distinguished career as a medical officer. Graduating from Jefferson Medical College in 1905, he entered the military service and advanced rapidly in grade from First Lieutenant in the Army Medical Corps in 1908 to Major General in 1943. He is at present personal physician to President Eisenhower.

Your Board, with the approval of the Board of Censors, recommends General Snyder's election to Honorary membership.

Dr. You Chan Yang Proposed for Honorary Membership: Dr. Yang is at present Ambassador from the Republic of Korea to the United States. He was graduated from the University of Hawaii in 1917. He entered Boston University's College of Liberal Arts on a scholarship and received his Bachelor of Science degree in 1920. His Doctor of Medicine degree was also received at the Boston University Medical School. Dr. Yang began private practice in Honolulu in 1923 and continued his professional activities until his appointment as Korean Ambassador in 1951. During this period he did postgraduate work in surgery, gynecology and obstetrics at the New York Post Graduate Hospital, the New York Lying-in Hospital and the Harvard Medical School.

This proposal will be referred to the Board of Censors for action by the Society at a later date.

Respectfully submitted,
Walter Freeman, M.D., *Chairman*
William M. Ballinger, M.D.
Hugh H. Hussey, M.D.
Preston A. McLendon, M.D.
William Ross Morris, M.D.
Herbert P. Ramsey, M.D.
Wallace M. Yater, M.D.
Theodore Wiprud, *Secretary*

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* Adopted at a special Business Session of the Medical Society of the District of Columbia at the Clinical Center of the National Institutes of Health in Bethesda, Md., September 23, 1953.

ROSTER OF MEDICAL BOWLERS FOR 1953–54

The D. C. Medical Bowling League opened its fifteenth season on Friday, September 25, 1953, at the Penn Bowling Recreation Center with Dr. Herbert P. Ramsey rolling the first ball down the alleys. Dr. Ramsey, President of the D. C. Medical Society, sent the pins flying with his first ball.

The newly elected officers of the D. C. Bowling League for 1953–54 are as follows: Dr. J. Earl Kadan, President; Dr. J. W. Price, Vice President; and Mr. William B. Cochrane, Secretary and Treasurer.

The Bowling League is composed of 16 teams and they meet every Friday night at 9:30 in spirited competition. The teams and their members are as follows:

Casualty: Dr. Alfred Dibbs, *Captain*; Drs. Henry H. Canton, John P. D'Angelo, Messrs. Paul Duffy, Kenneth W. Clark.

Children's: Dr. Frank S. Bacon, *Captain*; Drs. Ambrose H. Cook, Thomas J. Pekin, Israel Kessler, George A. Resta, John W. Nesbitt.

Columbia: Dr. J. Earl Kadan, *Captain*; Drs. A. J. B Connolly, Clyde P. Reeves, Messrs. Wilfred Boyer, Irwin Sealfon.

Doctors: Dr. W. Robert Perkins, *Captain*; Drs. Leland S. Madden, Ray N. Brown, Allen S. Lloyd, Benjamin Golden, Mr. James Carter.

Emergency No. 1: Dr. Robert R. Montgomery, *Captain*; Drs. William E. Nessell, Robert W. Sjogren, John W. Duchez, James L. Kelley.

Emergency No. 2: Dr. James A. Sowers, *Captain*; Drs. Otto T. Englehart, Harold H. Hawfield, Thomas G. Edison, Hamilton P. Dorman, Richard H. Fischer.

Garfield No. 1: Dr. Ashby W. Smith, *Captain*; Drs. William G. Cushard, Duane C. Richtmeyer, Elmer Klein, Messrs. John E. Grubb, Carl R. Faircloth.

Georgetown: Dr. Roy G. Klepser, *Captain*; Drs. Brooks G. Brown, W. Luther Hall, Lawrence A. Rapee, Gordon R. MacDonald, William K. Billingsley.

George Washington: Dr. John W. Price, *Captain*; Drs. Blaine H. Eig, Bernard A. Fitzgerald, William R. Moses, James A. Roberts, Mr. Frank J. Baiers.

Good Hopers: Dr. Alfred Wilson, *Captain*; Drs.

Ernest E. Cornelson, Victor V. Skinner, J. J. Connors, J. E. Cotter.

Prince Georges: Dr. Charles Hageage, *Captain*; Drs. George J. Hageage, William Brainin, Frederick E. Musser, Leonard S. Berman.

Providence: Dr. Bruno Floria, *Captain*; Drs. Armand Franco, Garrett Reilly, Harold Heiges, William H. Clements.

Sibley No. 1: Dr. Joseph F. Belair, *Captain*; Drs. John F. Finnegan, Richard J. McNulty, George L. Ball, Francis X. Richardson.

Sibley No. 2: Dr. George H. McLain, *Captain*; Drs. Willis B. Morse, Raymond C. Kirchner, J. Phelps Hand, Sollie Katzman.

Suburban: Dr. G. Roland Gable, *Captain*; Drs. S. Paul Porton, Robert B. Irey, Andrew J. Betz, Millard F. Ottman, James B. Faris.

Washington Hospital Center: Dr. Maurice van Kinsbergen, *Captain*; Drs. Charles F. Hill, John A. Kennedy, Samuel D. Loube, Russel S. Page, Jr.

MEMBERSHIP

The following applicants for membership will be voted on at the meeting of the Executive Board, November 23, 1953.

For Active Membership

Dan G. Albert, Syracuse University—1950
Roger Baker, Tufts College—1943
Mary Louise Barker, University of Colorado—1948
Maxwell Boverman, University of California—1942
Arthur S. Bresler, Chicago Medical School—1951
James E. Chapman, George Washington University—1949
Lucille Price Carter, Syracuse University—1942
William Chin, George Washington University—1947
Paul B. Cornely, University of Michigan—1931
George Campbell Darr, New York University—1942
Arthur T. Davidson, Howard University—1945
William Thomas Driebe, Georgetown University—1950
Robert J. Faulconer, Johns Hopkins University—1947
Marvin M. Gibson, Duke University—1944
Owen Gwathney, Medical College of Virginia (Richmond)—1945
Errol N. Harding, McGill University—1949
Donald McC. Harper, Howard University—1928
Leroy E. Hoeck, State University of Iowa—1937
James Louis Keating, Georgetown University—1947
Charles E. Keegan, Jr., Georgetown University—1947
Christine Kehne, Johns Hopkins University—1949
Tiffany Lawyer, Jr., Albany Medical College—1942
E. Anne D. Mattern, University of Maryland—1947
Samuel B. McCottry, Jr., Howard University—1950
Arnold Namrow, Washington University (St. Louis)—1947
John P. Nasou, George Washington University—1952
Thomas Joseph O'Connor, Georgetown University—1949
Tom D. Raaen, New York University—1947
Edward L. Rea, George Washington University—1946
Norman H. Rubenstein, George Washington University—1950
William Shakin, New York Medical College—1943
Maurice Arthur Sislen, George Washington University—1947
James A. Sowers, George Washington University—1946
James E. Swan, Howard University—1948
Laszlo N. Tauber, Royal Hungarian Peter Pazmany University, Budapest, Hungary—1938
J. Richard Thistlethwaite, Duke University—1946
Russell M. Tilley, Jr., University of Maryland—1949
John B. Umhau, Jr., George Washington University—1952
Daniel Leigh Weiss, Columbia University—1946
Louise O. Wensel, George Washington University—1949
Stanley I. Wolf, Georgetown University—1948

For Associate Membership

Stanhope Bayne-Jones, Johns Hopkins University—1914
Luis Carbonell, Central University, Caracas, Venezuela—1949
Hugh S. Geiger, Jr., Emory University—1950
Julius Judah Gottlieb, D.S.C., Ohio College of Chiropody—1943
Morris M. Gottlieb, D.S.C., Illinois College of Chiropody—1933
Bjorn Gudbrandsson, University of Iceland—1945
Max M. Herzberg, Medical School, Basel, Switzerland—1951
Marion Elizabeth Maclean, George Washington University—1949
Robert P. Nenno, Loyola University—1947
Robert H. Parrott, Georgetown University—1949
Ralph F. Patten, Georgetown University—1946
Charles L. Smith, D.D.S., Georgetown University—1918
David A. St. Martin, University of Tennessee—1950
H. Robert Unger, George Washington University—1952
W. Leonard Weyl, University of Illinois—1945
M. Henry Williams, Jr., Yale University—1947

For Resident-Intern Membership

Jean D. Lockhart, Georgetown University—1951
Julius S. Piver, George Washington University—1952
Raymond Stoller, George Washington University—1946

COMING MEETINGS

THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA

December 16, 8:00 p.m.: Walter C. Alvarez, M.D., Internist, Editor, Author, speaking on "Great Light on the Common Neuroses"

January 6, 8:00 p.m.: Symposium on "Emotional Problems of Adolescents"

February 16, 17, and 18: ANNUAL MIDWINTER SEMINAR

March 3, 8:00 p.m.: Business meeting, plus "Stump the Medical Experts"—an opportunity to match wits with a panel of experts on things medical.

May 5, 8:00 p.m.: ANNUAL BUSINESS MEETING

News and Personals

The Seventh Annual Clinical Session of the American Medical Association will be held in St. Louis, December 1–4, 1953. All scientific activities will be held in the Kiel Auditorium. The House of Delegates will meet in the Jefferson Hotel. Planning to attend the meetings of the House of Delegates are Drs. Hugh H. Hussey and Raymond T. Holden, the Medical Society's delegates to the AMA, and Dr. Herbert P. Ramsey, President, and Theodore Wiprud, Secretary, of the Medical Society.

The Seventh Annual Medical Public Relations Conference will convene Monday, November 30, preceding the Clinical Session. Speakers from four representative societies have been asked to conduct a panel discussion on "Making a PR Program Work." Dr. Josephine Renshaw, Chairman of the Medical Society's Committee on Public Information, will be one of the speakers for this part of the program.

The Second Clinical Session of the American Academy of Obstetrics and Gynecology will convene in Cincinnati, Ohio, December 14–16, 1953. The meetings will be held in the Netherland Plaza Hotel. Chairman of the Program Committee is **Dr. Andrew J. Marchetti,** Professor and Director of the Department of Obstetrics and Gynecology of Georgetown University School of Medicine.

The Ninth Annual Pearl Harbor Day Reunion of the Physician-Veterans of World War II will be held at the Dupont Plaza on Monday night, December 7, 1953, at 7 p.m. Presiding will be Dr. Frank S. Ashburn, President.

Since the Washington group is now part of a national organization, it is anticipated that a majority of its 500 members will attend the dinner. Dr. Luther W. Gray, Chairman of the Committee on Arrangements, is planning an excellent program, details of which will be sent members by mail.

The George Washington University Medical Society will meet, November 18, in the Medical Society's auditorium, at 8:15 p.m., to hear a lecture by Dr. Harry F. Dowling, Chairman of the Department of Medicine, University of Illinois College of Medicine. Dr. Dowling, who practiced in the District of Columbia for many years and was on the faculty of George Washington University School of Medicine from 1934 to 1950, will speak on "Dangerous Reactions to Antibiotics."

Physicians in the Washington area may receive a year's **complimentary subscription** to *CA-Bulletin of Cancer Progress* by writing to Cancer, Washington 5, D. C. This is one of the free services of the District of Columbia Division of the American Cancer Society. This offer is also open to fourth-year medical students of George Washington, Georgetown and Howard Universities.

The Arthritis and Rheumatism Foundation of the District of Columbia, Inc. is appealling for contributions to strengthen its organization. There are approximately 50,000 people in the District with arthritis and it is anticipated that there will be an additional 2,000 patients during the coming year.

This year the Foundation hopes to enlarge its homebound physical therapy program to include two mobile physical therapy units. This will permit physical therapists to attend homebound patients who are unable to visit the existing clinics and those patients who could not otherwise afford this care.

The appeal for funds is made by the following members of the Medical Advisory Committee: Dr. Charles S. Wise, Chairman; Drs. Thomas McP. Brown, Joseph J. Bunim, Milton C. Cobey, Darrell C. Crain, Isadore Levin, Charles P. Ryland, and Ruth H. Wichelhausen.

A competitive examination for appointment of Medical Officers to the Regular Corps of the United

States Public Health Service is scheduled for February 2, 3 and 4, 1954. Examinations will be held at a number of points throughout the United States, located as centrally as possible in relation to the homes of candidates. Application forms and complete information may be obtained by writing to the Chief, Division of Commissioned Officers, Public Health Service, Department of Health, Education and Welfare, Washington 25, D. C. Completed application forms must be received in the Division of Commissioned officers no later than December 24, 1953.

The District of Columbia had the largest number of **applicants for admission to medical schools** this fall—19 per 100,000 population, while the doctor ratio is 31 per 10,000 population. New York ranked second with 18 applicants per 100,000 population and a doctor ratio of 20 per 10,000.

These were some of the interesting figures released by the Association of American Medical Colleges and reported in the October issue of the *Journal of Medical Education*. The Association made the deduction that "states with the highest number of doctors per capita have the largest number of young men and women who want to enter medical school . . . . It is suggested that the common economic, educational and cultural factors which attract doctors also stimulate students to become doctors."

Currently the **George Washington University School of Medicine** is conducting a **Postgraduate Course for Physicians** on "The Practical Application of the Basic Sciences in Cardiovascular Diseases." The sessions, which began on October 8, are held on Thursday evenings, 8:30 to 10:30, in the Conference Room of the University's Hospital. Dr. Thomas M. Peery is Director of Postgraduate Instruction at George Washington.

The Executive Board of the Medical Society of the District of Columbia held its regular meeting on September 28. Dr. Wallace M. Yater, chairman of the committee on selection of the Davidson Lecture, reported that Dr. George E. Schreiner's paper on "The Physiology of Arteriovenous Fistulas" had been selected for the award. The Board accepted the report of the committee. The date of presentation of the Davidson Lecture has not been decided upon but will be announced in the near future.

At the request of President Ramsey, the Board voted that Dr. You Chan Yang, the Korean Ambassador to the United States, be proposed to the Society for Honorary membership.

Dr. George Maksim was authorized to represent the Medical Society at the Fourth National Conference on Physicians and Schools in Highland Park, Illinois, September 30–October 2; this meeting is sponsored by the AMA.

A communication received from the Committee on Federal Medical Services of the American Medical Association urged participation of the Society in the deliberations of the Committee. It was suggested that a committee on veterans care be appointed or that individuals be appointed who would represent the Society when conferences, sponsored by the AMA, are held on this subject. A tentative series of conferences are scheduled, the first to be held in Washington on November 15. The Board voted to establish a Committee on the Medical Care of Veterans.

The 39th Clinical Congress of the American College of Surgeons closed its five-day session at the Conrad Hilton Hotel in Chicago, October 9. The District Medical Society was represented on the scientific program by Drs. Brian Blades, Murray M. Copeland, William P. Herbst, Charles A. Hufnagel, Calvin T. Klopp, Howard Pierpont, William T. Spence, and J. Ross Veal.

Dr. Copeland was moderator for a Panel Discussion on Diagnosis and Treatment of Osteogenic Sarcoma, October 9. On the same day Dr. Herbst participated in a Panel Discussion on Urological Endocrinology, speaking specifically on "Hypogonadism."

Dr. Veal and Dr. Hufnagel took part in a Postgraduate Course on Cardiovascular Surgery. Dr. Veal was moderator for a discussion of Surgical Problems Concerning the Peripheral Venous System, October 6. On October 9 Dr. Hufnagel discussed "Vessel Grafts" as part of the Latest Developments in the Field of Cardiovascular Surgery.

Medical Society members contributed four papers to the Forum on Fundamental Surgical Problems:

"A Method for the Sterilization and Preservation of Arterial Homo- and Heterografts," Dr. Charles A. Hufnagel, Dr. Pierre J. Rabil and Lois Reed, Department of Surgery, Georgetown University School of Medicine

CALENDAR OF MEETINGS, SEPTEMBER 16–OCTOBER 15, 1953

September 16	Lay Society, Diabetes Association of D. C.
September 17	Committee on Public Health and Chairmen of all Subcommittees
September 18	Traffic Committee
September 21	Committee on Public Health Sports Committee
September 22	Section on Pathology and Laboratory Medicine
September 25	Section on Dermatology Medical Advisory Board
September 28	Executive Board
September 29	Grievance Committee Subcommittee on Alcoholism
September 30	Subcommittee to Review Claims for Liability Insurance
October 1	Section on Anesthesiology Nursing Home Operators, UCS
October 2	Section on Pathology
October 3	Southeastern Surgical Congress, Washington Chapter
October 5	Graduate Nurses' Association
October 7	Executive Board, Woman's Auxiliary
October 9	Washington Psychiatric Society Committee on Lay Coöperation, Washington Psychoanalytical Society
October 10	Washington Psychoanalytical Society
October 12	Program Committee D. C. Chapter, American Federation for Clinical Research
October 13	Medical Officers' Reserve Units
October 14	Woman's Auxiliary Society of Registered X-ray Technicians of Washington

"An Explanation for Some Local Complications Produced by Intra-arterially Administered Thorotrast," Eberhard Trams, Dr. Calvin T. Klopp and Dr. Brian Blades, George Washington University School of Medicine

"The Effect of Experimental Lung Ischemia on Pulmonary Function," Drs. Brian Blades, Howard Pierpont, Abdussamed Samadi and Robert P. Hill, Surgical Research Laboratory, George Washington University School of Medicine

"Form Fitting Plastic Cranioplasty in Brain Tumor," Dr. William T. Spence

This Clinical Congress marked the passing of the daily "wet clinics," the last having been held in New York in 1952. Today the so-called Ciné clinics and TV clinics have completely supplanted the traditional visits of surgeons to the operating rooms of local hospitals during the Clinical Congress.

Drs. Roger C. Baker, Brooks G. Brown, Alan R. Crain, J. Blaine Harrell, Charles E. Horner, James L. Kelley, Emmett P. Madigan, Floyd S. Rogers, Ferdinand Welebir, and Jack E. White, all of the District of Columbia, were elected to fellowship in the College at this meeting.

Dr. Thomas F. McDermott, Professor of Anesthesiology, Georgetown University School of Medicine, attended the annual convention of the **American Society of Anesthesiologists** in Seattle, October 5–9. During the meetings he assisted in the oral examinations for the College, of which he is a member of the Board of Governors.

Dr. Robert R. Cross represented the District of Columbia Society of Anesthesiologists at the meeting of the House of Delegates.

Dr. Melvin A. Casberg, Assistant Secretary of Defense (Health and Medical), participated in a panel discussion, October 8, on "What Part Can the Anesthesiologist Play in Civil Defense?" Dr. Casberg is an Honorary member of the District Medical Society.

The Annual Meeting of the District of Columbia Division of the American Cancer Society was held in the Washington Post Community Room on October 12. Dr. Murray M. Copeland, President, welcomed the members and guests.

Drs. Calvin T. Klopp, William P. Herbst and Harry H. Kerr participated in the panel discussion on "Cancer: Today and Tomorrow"; Leif Eid was moderator.

Mr. Frederick P. H. Siddons, Vice President of the American Security and Trust Company, was elected President of the District Division, succeeding Dr. Copeland, who has served as President since 1951. Dr. Klopp was reëlected Secretary.

Drs. Ralph M. Caulk, Peter D. Comanduras, and Paul B. Cornely were among those elected to serve for a three-year period on the Board of Trustees. Members of the Executive Committee include Dr.

Caulk, Dr. Copeland, Dr. Kerr, and Dr. Raymond T. Holden.

On September 11, 1953 the proposed **District Branch of the American Psychiatric Association** was formally organized in the library of the D. C. Medical Society. Dr. Henry P. Laughlin served as chairman *pro tem.* After a constitution was adopted, the following officers were elected: Dr. Laughlin, President; Dr. T. Douglas Noble, Vice President; Dr. Seymour J. Rosenberg, Secretary; and Dr. Marshall deG. Ruffin, Treasurer.

The Metropolitan Washington District Branch will serve as the official group representing A.P.A. members of this area in the national association. The new group will work in closest concert with the Washington Psychiatric Society. All meetings will be planned jointly with W.P.S. except for the annual meeting and any special meetings called by the officers. The necessary formal petition, signed by 70 representative A.P.A. area members, has been submitted to the Council of the national organization. Negotiations are now in progress with the Virginia District Branch directed toward securing mutually acceptable geographic boundaries.

A Regional Meeting of the American Cancer Society was held at the Mayflower Hotel, September 26 and 27. The following program was presented during the scientific session, September 26, with Dr. Calvin T. Klopp presiding:

"A Statistical Study of the Results of Treatment of Breast Cancer," Dr. Ernest A. Gould

"Recent Advances in the Chemotherapy of Leukemia and Malignant Tumors of Children," Dr. E. Clarence Rice

"Clinical Trials of Chemotherapeutic Agents," Dr. Jeanne C. Bateman

"Some Problems of Cancer Control in a Negro Institution," Dr. Jack E. White

"The Problem of the So-called 'Silent Cancer,'" Dr. Robert J. Coffey

"Cancer Training and Control in an Eye, Ear and Throat Hospital," Dr. Alfred A. J. Den

The dinner meeting held in the Chinese Room on Saturday evening was addressed by Dr. Harold Dorn, of the National Cancer Institute, on "The Geographic Pathology of Cancer." On Sunday afternoon Society members and guests toured the new Clinical Center at the National Institutes of Health in Bethesda.

Dr. Klopp was named professional representative of Region 2 of the Board of Directors of the American Cancer Society, which is made up of seven regions throughout the United States. Dr. Klopp has been Director of the George Washington University Cancer Clinic since 1948.

The Washington, D. C. Chapter of the American Federation for Clinical Research met on October 12 in the Medical Society's Library. The following papers were presented at this meeting:

"The Relation of Basal Body Temperature to the Excretion of Pregnanediol," Dr. Richard H. Fischer, Doctors Hospital

"Ionic Interrelationships and Potassium Intoxication," Major W. H. Meroney, MC, and Lt. R. F. Herndon, MC, Walter Reed Army Medical Center

"Transcapillary Migration of Deuterium Oxide and Potassium Thiocyanate in the Lungs of Man," Drs. Lawrence S. Lilienfield, Edward D. Freis, and Edward A. Partenope, Georgetown University School of Medicine and Veterans Administration Hospital

"Albers-Schonberg Disease Complicated by Acromegaly," Dr. Riley F. Thomas, Howard University School of Medicine

"Treatment of Hypertension with a New Ganglionic Blocking Agent, Pentapyrrolidinium (M & B 2050)," Drs. Edward A. Partenope, Lawrence S. Lilienfield, John C. Rose and Edward D. Freis, Georgetown University Hospital and Veterans Administration Hospital

"Homozygous Hemoglobin C Disease: A New Hereditary Hemolytic Syndrome," Drs. Douglas W. Terry, Arno Motulsky, and Charles E. Rath, Georgetown University Hospital and Walter Reed Army Medical Center

The next meeting of the Chapter will be held in the Medical Society's Library, December 14, at 8 p.m.

Dr. E. Clarence Rice, chairman of the fund-raising campaign for the continuation of Garfield Memorial Hospital School of Nursing, reports a total subscription to date of $26,000. Dr. Rice has set a campaign goal of $60,000, which would keep the School of Nursing, the only independent nursing school in the District of Columbia, in operation for two years. Contributions may be sent directly to the Garfield Hospital School of Nursing, Washington, D. C.; any amount will be greatly appreciated.

The Metropolitan Washington Tuberculosis Conference, which is sponsored by the District of Columbia, Maryland State, and Virginia State Tuberculosis Associations, was held on October 27 in the Health, Education and Welfare Building. Dr. Howard M. Payne presided at the opening session and introduced the guest speaker, who was Dr. William B. Tucker, Chief of Tuberculosis Service, Veterans Administration Hospital, Minneapolis, Minn.

At the closed scientific session which followed, Dr. Roy G. Klepser presided. Panel participants were Drs. Edgar W. Davis, Sol Katz, Daniel L. Finucane, James R. Laurey, and Ross McLean (Baltimore). Dr. John W. Trenis summarized the discussion.

At the first fall meeting of the **George Martin Kober Medical Society,** October 19, Dr. W. Ross Morris presented a paper on "Mesenteric Vascular Occlusion." Dr. John J. Kuhn was host to the Society at the Army-Navy Club.

The Section on Otolaryngology held its first meeting of the 1953–54 season at the Burlington Hotel, September 16. The guest speaker was Dr. John P. Gallagher, Assistant Professor of Neurosurgery at Georgetown University; his topic for discussion, "Vertigo."

The Washington Psychiatric Society met in the Medical Society's auditorium, October 9, to discuss the role of the psychiatrist as an expert witness in court. Dr. Winfred Overholser, Superintendent of St. Elizabeths Hospital, was moderator for the panel discussion. Members of the panel included: Judge David L. Bazelon of the U. S. Court of Appeals; Hugh J. McGee, Chairman of the District Bar Association's Committee on Mental Health; Dr. Robert T. Morse, Assistant Professor of Clinical Psychiatry at Georgetown University; and Dr. Zigmond M. Lebensohn, Associate Professor of Psychiatry at Georgetown.

The Arlington County (Virginia) Health Department has again (for the third successive year) been approved for the next two years for residency training in public health and preventive medicine by the Council on Medical Education and Hospitals of the American Medical Association and the American Board of Preventive Medicine. It is one of 39 in the Nation so designated. Dr. Howard Cadwell is the current trainee.

The Montgomery County (Maryland) Medical Society celebrated its golden anniversary in October. The county organization was host to physicians from all of Maryland at the regular meeting of the State Medical and Chirurgical Faculty at the National Institutes of Health, in Bethesda, October 6. More than 250 physicians attended.

Dr. William S. Murphy, of Rockville, President of the county society, and Dr. Maurice C. Pincoffs, President of the state society, welcomed the guests. A highlight of the meeting was an account of the history of the society by one of its oldest surviving members, Dr. J. W. Bird, of Sandy Spring. Dr. Bird, who was Secretary of the society for 28 years, is an Associate member of the District Medical Society. The general meeting concluded with an address by Dr. Leonard A. Scheele, Surgeon General of the Public Health Service, who spoke on "Medical Research, the Physicians, and Public Health."

Following the general meeting medical seminars were presented by staff members of the National Institutes of Health. In the evening a dinner dance was held at the Congressional Country Club.

Listed below are the **annual grants by the District of Columbia Division of the American Cancer Society** for the fiscal years 1952–53 and 1953–54 to local institutions for professional service and education:

	1952–53	1953–54
Georgetown University Hospital	$15,349.50	$14,809.50
George Washington University Cancer Clinic	15,000.00	15,000.00
Garfield Memorial Hospital Tumor and Cancer Detection Clinic	8,450.00	11,367.00
Instructive Visiting Nurse Society	5,200.00	5,200.00
Washington Home for Incurables	5,000.00	5,000.00
Children's Hospital	4,180.00	3,570.00
Episcopal Eye, Ear and Throat Hospital	3,600.00	4,600.00
Howard University	3,600.00	3,756.00
Dental Symposium		1,350.00
	$60,379.50	$64,652.50

The grant this year to Episcopal was increased by $1,000 over last year, the additional sum to be used for speech therapy training. A new grant was made this year to the Dental Symposium, a postgraduate clinic sponsored by the D. C. Dental Society.

Dr. Hugh H. Hussey has been appointed Professor and Head of the Department of Preventive Medicine and Public Health at the Georgetown University School of Medicine. He also becomes a member of the Executive Faculty of the Medical School.

Dr. Hussey, a graduate of Georgetown University School of Medicine, was named Instructor in Clinical Medicine in Georgetown in 1936; since 1941 he has served as Associate Professor of Medicine. He is also Chief of the Georgetown Medical Division at the D. C. General Hospital. He will continue to serve in these posts.

Dr. Hussey is Editor of GP. He is a senior consultant in medicine to Mount Alto Hospital, consultant in medicine at Glenn Dale Sanatorium, and Vice Chairman of the Public Health Advisory Council to the Commissioners of the District of Columbia.

Dr. Daniel F. Lynch, an Associate member of the District Medical Society, was chosen President-elect of the American Dental Association at its meeting in Cleveland, Ohio, September 28–October 1. He was President of the District Dental Society in 1940.

Dr. Lynch graduated in 1925 from the University of Maryland College of Dental Surgery; he was an intern at the Mayo Clinic in Rochester, Minn., from 1926 to 1928. During World War II he served in the Dental Corps of the U. S. Navy. He is a member of the Royal College of Surgeons, England. In 1936 he was the official representative of the United States at the Ninth International Dental Congress held in Vienna, Austria.

Dr. Margaret M. Nicholson, Clinical Professor of Pediatrics, George Washington University School of Medicine, **and Dr. Helen Brooke Taussig,** Associate Professor of Pediatrics, Johns Hopkins University School of Medicine, were elected to Honorary membership in the Cuban Heart Association, October 13, during its meeting in Havana.

Mr. Aaron Goldman, Campaign Chairman for the **1954 Community Chest-USO fund-raising campaign,** announced the appointment of Attorney Robert K. Eifler as Chairman of the professional group, which embraces attorneys, physicians and dentists. Vice Chairmen are Dr. Edward C. Mazique and Attorney Richard K. Lyon.

Dr. J. Ross Veal, whose personal appeal for funds for the campaign appeared in the October issue of the MEDICAL ANNALS, is Chairman of the Physicians' Group. Assisting him are Drs. Oscar B. Hunter, Jr., Benjamin Jones and Richard T. Sullivan.

General solicitation in the campaign began October 12. The professional group is seeking $153,957, allocated as follows: $106,665 from attorneys; $37,472 from physicians; and $9,820 from dentists.

Dr. Murray M. Copeland, Professor of Oncology, Georgetown University School of Medicine, participated in a Seminar on Pathology of Ionizing Radiation Injury, September 22, at the Armed Forces Institute of Pathology. The subject of his paper was "Musculoskeletal System Injury."

On September 24 Dr. Copeland addressed the Medical Association of the Valley of Virginia on "Premalignant Lesions of the Breast."

Dr. Copeland gave several lectures in Oklahoma the latter part of October. As guest speaker at the 23rd Annual Fall Conference of the Oklahoma City Clinical Society in Oklahoma City, October 26 and 27, he gave two addresses, "Certain Forms of Chronic Cystic Mastitis (Breast Dysplasia)" and "The Use of Radioisotopes in Surgery." In addition to the two lectures Dr. Copeland was moderator of a panel discussion on "Intra-oral Cancer."

Mr. Paul J. Foley was appointed Deputy Director of the District's new Department of Occupations and Professions, October 12, by Mr. Robert Cogswell, Department Director. Mr. Foley is well known to Washington physicians through his duties over many years as Administrative Assistant to two of the 19 licensing groups brought together to form the Department, the Commission on Licensure to Practice the Healing Art and the Board of Podiatry Examiners. Mr. Foley will continue temporarily in both positions.

The new Department of Occupations and Professions was established by the District Commissioners in their reorganization of the City Government. The two licensing units for which Mr. Foley is administrative assistant have moved into the old Force School, 1740 Massachusetts Avenue, N.W. This will be the headquarters for the Department, which began to function, October 15.

Drs. Charles Stanley White, Sr. and Dr. Jonathan M. Williams were among the speakers at the **18th Annual Meeting of the United States Chapter, International College of Surgeons,** in New York City, held at the Waldorf-Astoria, September 13–17. Dr. White, who is head of the Department of Surgery, Doctors Hospital, gave the Custis Lee Hall Lecture, September 16, on "Surgical Complications of Diverticulosis of the Colon." Dr. Williams, Assistant Professor of Neurosurgery at George Washington University School of Medicine, presented a paper on "Focal Spinal Arachnoiditis Complicating Spinal Anesthesia."

Drs. Richard Francis Jones, William C. Meloy, and Duane C. Richtmeyer were elected to fellowship in the College at this meeting. All three are Active members of the District Medical Society.

Dr. Oscar B. Hunter, Jr. attended the meeting of the American Association of Blood Banks in Chicago at the LaSalle Hotel, October 17–20, and presented a paper at the meeting on "Further Studies on Dosage Control of Cortisone and ACTH in Hemolytic Disease of the Newborn."

On October 13 Dr. Hunter took part in a Symposium on Blood Banking during the meeting of the American Society of Clinical Pathology, also held in Chicago, at the Drake Hotel. His paper was entitled "Blood Transfusion Reactions Causes."

Dr. Floyd S. Daft has been appointed Director o the National Institute of Arthritis and Metabolic Diseases of the National Institutes of Health. Dr. Daft, Acting Director of the Institute since the resignation of Dr. Russell M. Wilder last June, had been Assistant Director and Chief of Laboratory Research since 1951 and a member of the scientific staff of the Institutes since 1937. He received his medical degree from Yale University in 1926.

Dr. William T. Spence was traveling and lecturing in Europe during the summer months. At the German Neurological Institute in Munich, Germany, he presented a paper on "The Influence of the Central Nervous System on Carbohydrates and Protein Metabolism." In Lisbon, Portugal, at the International Neurological Association he demonstrated an operation that he had devised on plastic cranioplasty. The same paper he presented in Munich was also read before the International Congress of the Neurovegetata Society in Florence, Italy. The project on which the paper was based was carried out in collaboration with Drs. D. Rioch, Webb Haymaker, Evelyn Anderson and K. Knowlton. Dr. Spence was elected to the Central Committee of the Society.

At the recent meeting of the American Society of Clinical Pathologists in Chicago, October 12,

CALENDAR OF SPEAKERS

The following members of the Medical Society of the District of Columbia have addressed lay groups during the past several weeks. The Society maintains a Speakers Bureau, sponsored by the Committee on Public Information, through which requests for speakers for lay groups, including radio programs, can be filled.

Date	*Speaker*	*Subject or Title*	*Organization*
June 9	Dr. Daniel L. Seckinger	Cancer Conditions and Needs in D. C.	Cured Cancer Club
July 8	Dr. Margaret M. Nicholson	Women in the Medical Profession	Zonta Club
October 13	Dr. Petrena Abbe Shea	Courtship and Premarital Relations	Planned Parenthood Association and Jewish Community Center
October 15	Dr. Julius Schreiber	Doing Our Job as Parents	Yorktown Parent-Teachers Association, Arlington, Va.
October 19	Dr. Julius Schreiber	The Emotionally Healthy Family	Radcliffe Alumni Club of Washington
November 2	Dr. Julius Schreiber	Emotional Needs of Children	Phoebe Hearst School Parent-Teachers Association
November 24	Dr. Julius Schreiber	Doing Our Job as Parents	Parents Group, Beverly Hills Preschool, Alexandria, Va.

Colonel James E. Ash, MC, USA (ret.) received the annual Ward Burdick Award *quo vadimus* for his outstanding contributions to the field of pathology. Colonel Ash was formerly Director of the Armed Forces Institute of Pathology.

Lt. Colonel Harry A. Horstman, Jr., was awarded a citation for outstanding performance of duty at Walter Reed Army Medical Center as he retired from the Army after having served as Chief of the Hospital's Outpatient Service since August 1952. Dr. Horstman has opened his office for private practice in internal medicine at 2023 R Street, N.W.

Dr. Roland B. Scott, Chief Pediatrician of Freedmen's Hospital, presented a paper on "Milk Allergy in Young Infants" before the Allergy Section of the American Academy of Pediatrics in Miami, Florida, October 3–9.

Dr. William T. Spence was interviewed on the radio program carried over WRC, October 29, at the request of the American Federation of the Physically Handicapped. The program dealt with the gainful employment of people who are physically handicapped because of diseases or injuries of the nervous system.

Dr. Oscar B. Hunter, Jr., Director of the Hunter Memorial Laboratory at Doctors Hospital, has been elected President of the Georgetown University Alumni Club. He was Vice President of the Club last year.

Six vice presidents to represent the alumni of the University's six departments were elected. **Dr. August Kramm** was chosen to represent the School of Medicine.

President and Mrs. Herbert P. Ramsey attended the Fifth Annual Banquet of the Maryland Academy of General Practice at the Lord Baltimore Hotel in Baltimore, October 21, as guests of the Academy.

Lt. Colonel F. Daniel Suttenfield attended the Eighth International Congress on Rheumatic Diseases in Geneva, Switzerland, August 24–28, as the official delegate of the United States.

Dr. Virgil T. DeVault, Medical Director of the Foreign Service and Department of State, was guest speaker at a luncheon given by the Pan American Liaison Committee of Women's Organizations at the Congressional Hotel, October 3. The luncheon honored 24 visiting Latin American women physicians who were delegates to the Fourth Congress of the Pan American Medical Women's Alliance. **Dr. Cecile L. Fusfeld,** President of the Women's Medical Society of the District of Columbia, was one of the honored guests at the luncheon.

Captain William Tenenblatt, MC, USA, is returning to private practice after two years' service in the Army Medical Corps. For the past year he has been Chief of the Obstetrics and Gynecology Service at Fort George G. Meade, Maryland.

Dr. William K. Billingsley, internist, has moved to Long Beach, California, where he is associated with the Boyd Clinic.

Dr. Kenneth E. Blundon is now practicing in Charleston, West Virginia, at 1120 Quarrier Street and has become a member of the Kanawha County Medical Society.

BOOK REVIEW

Clinical Diagnosis by Laboratory Methods: A Working Manual of Clinical Pathology, 12th ed. JAMES CAMPBELL TODD, PH.B., M.D., Late Professor of Clinical Pathology, University of Colorado School of Medicine; ARTHUR HAWLEY SANFORD, A.M., M.D., Emeritus Professor of Clinical Pathology, The Mayo Foundation, University of Minnesota; Emeritus Member, Division of Clinical Laboratories, The Mayo Clinic; Director of Laboratories, Rochester State Hospital; AND BENJAMIN B. WELLS, M.D., PH.D., Professor of Medicine, Department of Medicine, School of Medicine, University of Arkansas. Price, $8.50. Pp. 998, with 946 illustrations, 197 in color, on 403 figures. Philadelphia: Saunders, 1953.

This most recent revision of one of the standard texts on clinical laboratory methods presents concisely the basic information and references required to enable the practitioner, technician or student to perform all necessary diagnostic clinical laboratory procedures. The authors present the classic procedures as well as alternative methods for many of the examinations. Throughout this volume, one is impressed with the organization of the material, the clarity of presentation of the technical sections, and the interpretation of the results. The adequate index permits ready reference to the desired information.

The chapters on urine and on serologic tests are particularly good. The limited use of colored plates in the section on hematology detracts slightly from an otherwise fine presentation.

This volume is highly recommended to all those who do not now have a well organized and clearly presented recent text of diagnostic clinical laboratory methods.

Edward C. McGarry, M.D.

Fever as a Symptom—Isaacs

(*Continued from page 599*)

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Mile Posts to Health

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Eligibility screening and admission procedures should be such that no patient is turned away without first ascertaining whether or not there are medical indications for immediate service. If there are, making appropriate arrangements should be the responsibility of the admitting office involved.

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PHYSICAL MEASUREMENT AND MEDICINE*

ALLEN V. ASTIN, PH.D.
Director, National Bureau of Standards

I APPRECIATE very much the honor and privilege of speaking to this distinguished group of members of the Medical Society of the District of Columbia. I plan to use this opportunity to discuss some aspects of the interrelatedness of the physical and medical sciences and, in this connection, to draw on the work of the National Bureau of Standards for illustrative examples. This interrelatedness occurs primarily in the field of measurement and analysis, a field which is of particular importance to the strong, orderly development of science. It is inevitable that the National Bureau of Standards should have interest and competence in measurement, since measurement problems underlie our basic objectives.

Although the Bureau, as a service agency, conducts many programs of scientific and technologic assistance to other Government agencies, it is fundamentally concerned with the development, maintenance and utilization of the standards for physical measurement; with measuring the basic properties of materials; and with developing methods of testing materials, mechanisms and structures. The fulfillment of these fundamental functions involves consideration of a wide variety of measurement and instrumentation problems in the many branches of physics, chemistry, metallurgy and engineering.

Among physical scientists the importance of measurement to the understanding and advancement of science is universally appreciated and accepted. It was perhaps best summarized by the famous 19th century British physicist, Lord Kelvin, in a classic statement. He said that when you can measure what you are speaking about and express it in numbers, you know something about it, but when you can not measure it and can not express it in numbers, your knowledge is of a meager and unsatisfactory kind. It may be the beginning of knowledge, but you have scarcely, in your thoughts, advanced to the stage of science, whatever the matter may be. This statement is probably just as applicable to the biologic sciences as to the physical sciences, but its realization in the former is undoubtedly much more difficult.

An essential part of the utilization of the experimental technic in science is the development of tools or instruments by which measurements can be made and observations facilitated. Useful instruments must have a number of specific characteristics: They must be accurate and reliable; they must respond to stimuli in a consistent and reproducible manner; they must have adequate sensitivity and resolving power, and finally, they must not alter appreciably the quantity being measured. This last requirement is a particularly important one and represents, to some extent, a basic paradox. It is a generally accepted principle of physics that one can not measure any quantity without altering it in some way and because of this, infinite precision is inherently impossible. Hence a basic problem in instrumentation is to design the measuring device to produce the minimum acceptable disturbance on the object being measured.

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* Address delivered at the George Washington University Medical Society Luncheon, October 7, 1953, during the 24th ANNUAL SCIENTIFIC ASSEMBLY of The Medical Society of the District of Columbia.

The achievement of satisfactory instruments for biologic observations presents a number of difficulties because of such things as the inaccessibility and delicacy of most biologic organs and elements, interference caused by possible pain, the necessity of not interfering with the life processes, and finally, the ease with which the properties, functioning, and structure of the item being examined can be altered by the intrusion of any measuring devices or process.

In spite of these difficult requirements, there has been substantial progress in the isolation and identification of many of the chemical and physical properties of the components of the human system. In fact, there appears to be an increasing tendency to attempt to describe biologic processes in terms of the concepts of physics and chemistry. This has been and is being done, for example, in circulation, respiration, digestion, the functions of the ductless glands, the propagation of nerve impulses, and the nature of muscle action. This tendency is perhaps best shown by the formation and rapid growth of biochemistry, biophysics, and biometrics as major subdivisions of science.

A substantial factor in the success of these specialties has been the recent remarkable increases in the quality, quantity and versatility of instruments and instrument technics available to the study of biologic processes. Most of these modern instruments, such as the electron microscope and the electrocardiograph, are based on electronic principles. It is perhaps no exaggeration to state that the phenomenal development of electronic technology in the past 25 years is the most important single factor in our present capability to expand the frontiers of science, both medical and physical, through observation, measurement, analysis and control. Electronic technics permit us to detect and transform all sorts of physical stimuli into electric signals, then amplify them, analyze them, record them, and display them.

The recognized importance of modern instrumentation and other technics of the physical sciences in biology is shown by the fact that leading clinics in this country and abroad, such as the Mayo Clinic and the London Post-Graduate Medical School, have full-scale engineering or physics laboratories in which new instruments are designed and built and existing instruments are kept in effective working order.

A parallel instance of the interrelatedness of the physical and biologic sciences is also shown by the fact that many leading institutions normally concerned only with engineering and the physical sciences now provide training and conduct research in biophysics and biochemistry.

Furthermore, even in a major physical science laboratory, such as the National Bureau of Standards, there are many parts of our program directly concerned with medical problems. And there are still other areas where a particular competence of the staff in instrument development or utilization has made possible the design of unique instruments to serve specific medical needs. I should like to discuss a few of these.

The utilization of X-rays and radium by the radiologists for either diagnosis or therapy requires information on allowable or necessary dosage or exposure, together with instruments for measuring these, and a knowledge of precautions to be observed for the protection of the doctors, nurses and technicians. The development of standards for measuring X-ray intensities, of calibrating instruments by which intensities and dosage can be measured, and of safety standards for the use and handling of X-rays are all major functions of the National Bureau of Standards. The same applies to the technics for the use of radium.

Recent years have seen a great increase in the voltage level of X-ray equipment, bringing about necessary changes in calibration technics and safety standards. Similarly, the atomic age has made available a wealth of new radioactive isotopes. All of these radiologic devices are finding increasing use not only for medical purposes but also in physical science laboratories and in industrial processes. Each of these presents to us specific and unique calibration and safety standards problems.

Closely related to the preceding is the extensive use now being made in many branches of experimental biology of radioactive tracer elements. The proper utilization of these remarkable tools requires the development of measurement standards with related instrumentation by the National Bureau of Standards. Furthermore, our staff has played a leading role in developing chemical compounds important in biologic processes which contain radioactive isotopes. The most notable example of this is radioactive sugar, and here our staff has been successful not only in building sugar molecules containing an atom of radioactive carbon but also in locating the radioactive carbon at a desired part of the sugar molecule. Approximately 15 different types of sugar molecules have been so constructed and identified, and calibrated samples of these have been made available for utilization in biologic research laboratories throughout the Nation.

Blood plasma is becoming increasingly important in medical therapy, so much so, in fact, that it is impracticable to secure enough human blood. Considerable effort has gone into the development of artificial blood plasma and plasma extenders. In this development an important problem is the control of the size of the plasma molecules. If the molecules are too large, there is a tendency toward clumping of the red blood cells; if the molecules are too small, the capillary membranes become permeable to the plasma. The development of methods of measuring and controlling the size of the molecules of artificial plasma within the required limits has been a contribution of the staff of the National Bureau of Standards in coöperation with a committee of the National Research Council which had over-all responsibility for the project.

The invention of the Einthoven string galvanometer, making possible important measurements on the performance of the heart, led to appreciable advances in the understanding, diagnosis and treatment of heart ailments. Here it is of interest to point out that this instrument, although invented by a medical doctor to fill a need which he saw, was for many years a powerful research tool in physical science research laboratories. This instrument has subsequently been replaced by much more versatile electronic devices, but, in general, there has not been much emphasis given to developing and using electrocardiographs with increased resolving power.

In a project of the National Bureau of Standards leading to the development of performance specifications for electrocardiographs, it has been shown that conventional cardiographs miss much fine structure in the ordinary heart beat. Some medical authorities appear to believe that if cardiographs with increased resolving power were more widely available for greater study of the fine structure of the heart beat, information might be ultimately acquired leading to greater understanding of the heart and its malfunctions. There are no major engineering obstacles in the design of such improved instruments.

Increased understanding of the heart and the circulatory system requires means of measuring rates of blood flow under various conditions and stimuli. Here a major difficulty has been the problem of measuring the blood flow without interfering with it, an excellent illustration of the basic paradox of instrumentation. There have been examples of flowmeters whose operation involves adding a foreign substance to the blood stream. The limitations of such a device are obvious.

Recently a member of our staff has perfected a new type of flowmeter which measures flow in any type of channel, a vein or artery, without penetrating the channel or requiring the addition of foreign substance to the flowing fluid. This flowmeter is based on electro-acoustic principles and represents an important advance in the instrumentation science. Doctors and biologists who have seen it demonstrated are enthusiastic in their appraisal of its possibilities as a research and diagnostic tool.

There are frequently requirements in medicine or biology which make it important to measure the total water content in a body or organism and to measure changes in this total content under different stimuli or treatment. A member of our staff has arrived at a simple, rapid and reliable method of accomplishing this measurement. A small, accurately determined quantity of heavy water is introduced into the body. In a very short period of time this heavy water is evenly distributed with the ordinary water throughout the body. The withdrawal of a sample of water from the body and the measurement of the ratio of heavy water to ordinary water in the sample gives, together with a knowledge of the amount of heavy water injected, an immediate measure of the total water content in the body.

Blood pressure, rate of heart beat, and rate of respiration are measurements widely used as a general indication of bodily state. During a critical operation or during the critical course of a treatment it is important to have data on these body performance characteristics. Consequently, a number of attempts have been made to develop instruments which would make these measurements and record them automatically. At the request of the Veterans Administration our electronic engineers have developed such an instrument, which we call a physiologic monitor.

This instrument records and registers automatically, approximately once every 3 minutes, the diastolic and systolic blood pressures. It also measures and records, at a similar frequency, the rate of heart beat and, if desired, the breathing rate. Other features tentatively included in the machine are methods of measuring air intake and cardiac arrhythmia. This instrument has now seen several months' clinical use in the Mount Alto and George Washington University Hospitals. Although there are some engineering improvements to be made, it has proved its practicability and it will undoubtedly prove to be a very useful tool in research, diagnosis and therapy.

These examples are by no means all-inclusive but serve only to illustrate areas where the physical scientist is aware of some of the instrument needs of medicine and is attempting, in close coöperation with the medical profession, to do something about it. Furthermore, the benefits of this technical activity are by no means one-sided. For example, the flowmeter just referred to was developed as a result of a suggestion for a biologic application but it now appears that it will have even greater utilization in a number of engineering applications.

In conclusion, I should like to generalize briefly on this interrelatedness. Achievements in one area of science or technology inevitably lead to benefits in others. Modern electronic instruments are the products of technology, which in turn is based on advances in fundamental science. But instruments themselves facilitate the growth of basic science, so that we have a closed loop with advances in each element of the loop stimulating advances in the other elements. When medical science is included in the loop, we will undoubtedly have the added factor that advances in medical science will lead to the increased scientific productivity of man himself.

VACCINATION AGAINST INFLUENZA*†

DORLAND J. DAVIS, M.D.
Bethesda, Maryland

IT SEEMS almost superfluous to point out that the disease influenza is a specific infection of man caused by a virus isolated first in 1933 by Smith, Andrewes and Laidlaw[1] whose biologic characteristics are as well or better known than the agents causing smallpox or yellow fever. When we speak of influenza we are not referring to a complex of respiratory infections such as the grippe, the common cold, "intestinal flu," "summer flu," or other clinical syndromes which may have some of the same clinical characteristics as influenza. It is true that the clinical differentiation between many upper respiratory infections is not easy; in fact, it is often impossible. However, influenza can be singled out partly by its epidemiologic characteristics and finally only by either the demonstration of a rise in specific serum antibody or the recovery and identification of the virus from the respiratory tract.

Whenever we think of influenza, the experience during 1918 and 1919 is immediately brought to mind, and perhaps it is well that this is so even though we have had no such disastrous event in the 35 years since that time. We now know that influenza as we have defined it, as a specific infection, occurs nearly every year in some part of the world, but during recent years, for reasons not understood, has become of gradually decreasing importance as a cause of death. Nevertheless, as a cause of morbidity with the accompanying disruption of normal community activities during the period of an epidemic it ranks of major importance. Furthermore, although the mortality now caused by the disease is not large in comparison with the 1918 experience, it is considerable, particularly in the older age groups. Last January and February, during the period of highest incidence, the death rate from influenza and pneumonia was 70.5 per 100,000 population, compared to 42.1 per 100,000 for the same months of the previous year, 1952, or an increase of 67 per cent.[2] Furthermore, there is always the threat of the recurrence of a pandemic similar to that of 1918 and 1919.

In the period prior to the development of technics for the specific identification of infection with this virus the disease was characterized perhaps best by its epidemiologic features. These included a high attack rate occurring over a space of a few weeks in a given locality, the almost simultaneous appearance of the disease in various parts of the country and even the world, the age specific attack rate highest in the school age population groups but the highest age specific death rate in the elderly, and the occurrence during the winter months generally, although sometimes in the spring and fall. The clinical features which generally have been observed include fever of approximately 5 days' duration, malaise, muscular aching, slight cough, and headache, including retro-orbital pain. However, except in the seasons of epidemic incidence these are not generally sufficiently distinguishing to permit an accurate diagnosis. In addition, there is no evidence that any of the antibiotics now available have any therapeutic value in the course of the primary disease caused by the virus of influenza, but they may be of real value in bacterial complications such as pneumonia. The fact that influenza remains a significant cause of death in the era of antibiotics should make us cautious in our hopes that they would be of great value in the event of a severe epidemic of influenza.

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* From the Laboratory of Infectious Diseases, National Microbiological Institute, National Institutes of Health, Public Health Service, United States Department of Health, Education and Welfare.

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In 1948 Dr. Francis G. Blake published a comprehensive review, "An Evaluation of Vaccination against Epidemic Influenza in Man."[3] In this report Dr. Blake reviewed the initial demonstration by Smith, Andrewes and Laidlaw,[1] and the confirmation by Francis[4] that a filtrable virus from patients with clinical influenza could be identified. In the period that followed this, from 1934 to the early 1940's, it was successively established that serum antibodies developed in humans in response to infection with the virus, that mice could be actively immunized against intranasal inoculation, that the virus could be grown in tissues of the developing chick embryo, that there were slight although detectable differences among strains from different sources, and that normal human subjects with little circulating antibody could be readily infected experimentally, while individuals with relatively high antibody titers were resistant. During this period the studies on vaccination of man included work with the human and swine viruses and vaccines made from mouse lungs and a complex influenza canine distemper vaccine. It was established also that there was a direct proportional relationship between the concentration of virus used for immunization of mice and the degree of active immunity to intranasal infection, which suggested the need for a more concentrated vaccine. In 1940 it was suspected that different types of influenza virus might exist, since epidemics had occurred in 1936 and 1939 from which virus was not recovered, nor a rise in antibodies to the established strains demonstrated. It was proposed that the disease caused by the viruses immunologically similar to the WS (1933-England) and PR8 (1934-USA) strains be designated as influenza A and that the terms influenza B and C, etc., be reserved for influenza caused by as yet unidentified agents when discovered. Shortly after this, Francis[5] reported the recovery and identification of an immunologically different type of influenza virus which was designated influenza B. Independently, Magill[6] at the same time also recovered influenza B virus, and others by retrospective serologic tests showed that epidemics in 1940 and 1939 were due to this serologically different type of virus which, however, produced a disease similar clinically.

An important advance was made in 1941 by Hirst,[7] who showed that chicken red blood cells were agglutinated by influenza virus and that this reaction could be inhibited by specific convalescent antisera. These observations have formed the basis for much of the serologic work in the 12 years since that time. With the development of the antibiotics, methods for the direct inoculation of throat washings into embryonated eggs have resulted in improved technics for the rapid isolation of influenza viruses.

The stimulus of World War II, using the knowledge obtained at that time of the properties of the virus, led to intensive studies on vaccination in man, very largely supported by the Commission on Influenza of the Army Epidemiological Board, later known as the Armed Forces Epidemiological Board. Efforts were directed toward the concentration of virus to produce a more potent antigen and methods for testing this potency and determining antibody responses at various periods following vaccination. In 1943 a well controlled study in the Army Student Training Program Units in 9 universities throughout the country was established for evaluating a formalized allantoic fluid concentrated vaccine made with the PR8 and WS strains of type A and the Lee strain of type B. In subsequent epidemics of influenza A developing in these institutions during late November and December the incidence of influenza was 2.22 per cent in the vaccinated compared with 7.11 per cent in the controls, or approximately a 70 per cent reduction in incidence. Two years later, in 1945, similar studies showed that this vaccine was likewise effective in reducing the incidence of influenza B. These studies plus others gave hope that a concentrated virus vaccine would reduce the incidence of influenza on a practical basis in large population groups.

Studies were continued in 1947 with the same vaccine previously used, both in student groups and in the Army. When epidemics of influenza occurred during that winter it was soon apparent that the vaccinated group was no better favored than the controls. The reason was soon obvious when antigenic studies of the strains isolated that winter showed that although they were similar to each other, they were dissimilar to the type A strains used in the vaccine and that the vaccine did not elicit a good antibody response against the 1947 strains. Since that experience the careful and detailed studies of Hilleman,[8] Magill,[9] Andrewes,[10] Hirst,[11] and others have reëmphasized the importance of a demonstrable progressive change in the antigenic composition of both influenza A and B virus. For instance, it has been shown that the strains isolated in 1950–1951 differ somewhat from those recovered in 1947, and more so from those recovered in the period 1934–1943. But, while the antigenic pattern of strains changes over a period of several years, strains isolated in any given epidemic are remarkably homogeneous. This applies not only to a single locality but also to strains recovered in all parts of the world in the same year. That this progressive antigenic change of the virus may be a response to passage in a partially immune host population has been suggested by Burnet[12] and Horsfall.[13] Francis[14] has pointed out, though, that the minor changes detectable by serologic tests may not be significant so far as protection by vaccination is concerned and that the significance of the variation has been best evaluated by actual vaccination studies. It should be borne in mind that these antigenic variations are not, so far as is known, a measure of their virulence or capacity to cause severe epidemics.

A serious effort has been made by the World Health Organization to coördinate information on the epidemiology of influenza and the exchange of recently isolated strains. A series of coöperating laboratories has been established in the countries of Europe, North America, and the Pacific area, with Strain Study Centers established in London and New York City. Here recently recovered strains from all parts of the world are studied with respect to each other and strains recovered in previous years. It was originally intended that such a system of collaboration would permit the identification of new strains or those of high virulence and their distribution to research laboratories. Should any of these strains appear to be sufficiently different antigenically or from severe outbreaks, it was hoped that there would be sufficient time to prepare a vaccine for areas not yet affected. However, the technical difficulties of preparing a vaccine from a recently isolated strain in large quantities and the administration to the population raise considerable doubt as to the practicality of such a plan as an emergency measure. It is more probable that the hope of keeping up with the changing antigenic pattern lies in the inclusion of recently isolated strains when they show significant variation from those already in the vaccine.

Studies of the last 20 years have improved our knowledge of the natural or acquired immunity to this disease, although there are many aspects not well understood. At first glance it appears that the immunity acquired naturally by an infection with the virus is rather short-lived, extending over a period of a few months only or at most several years, since individuals usually have clinical influenza several times during their lives. This may be true, but two considerations remain, (1) that since the virus is changing antigenically, the result may be repeated infections with the altered viruses, and (2) that during epidemics the younger age groups, particularly ages 5 to 20, have the highest attack rates, which suggests that previous exposure of adults to the agent has resulted in relative or partial immunity.

The specific antibodies produced in the patient's serum following an acute infection can be detected by several laboratory methods. The one most widely used is the previously mentioned hemagglutination inhibition test which depends upon the ability of convalescent serum to prevent the agglutination of human or chicken red blood cells by influenza virus in the test tube. By appropriate dilution methods it can be done quantitatively and is relatively specific for the strains of virus tested. Antibodies detectable in this test appear about 7 to 10 days after the onset of the illness and persist for 6 to 8 months. Evidence has been accumulating that antibody levels may remain at a low but detectable titer for some years, possibly as a result of repeated exposure to the virus without actual disease. This fact may give a measure of the immunity status of the population to specific strains.

Another widely used serologic method is the complement fixation test which distinguishes between types but not between various strains of the same type. Antibodies detectable by the complement fixation test disappear more rapidly and may be a better indication of the acute infection. The neutralization test using either embryonated eggs, mice or a combination gives further evidence of the presence of specific antibodies in the serum of persons who have had an encounter with the agent. Thus we see that there is evidence from a study of the natural infection in man to suggest that specific immunity which can be measured serologically does develop. This may be of rather long duration for the specific strain causing the infection or possibly of shorter duration for altered strains which may appear. This is the basis on which it is postulated that vaccination with influenza virus of the proper antigenic composition and strength will furnish immunity to the individual exposed to infection.

Since it is impossible to predict just what strain of virus might cause epidemics in the future, most vaccines and all of those commercially available contain a number of strains. To the older strains such as PR8, recently isolated strains such as the FW/1/50 or the FLW/1/52 have been added to furnish the newly appearing antigenic components for type A. Since type B influenza has occurred at approximately 6-year intervals and the antigen seems to have a greater capacity to produce immunity responses over a broader antigenic range, only 1 strain, Lee, is usually employed. This is an attempt to keep in the vaccines, strains which are likely to have the antigenic components which may appear in the next year or two, since so far the alteration appears to be a gradual one. These vaccines are prepared with virus grown in the allantoic sac of the developing chick embryo, concentrated to contain a uniform dose of antigen and killed by viricidal reagents or irradiation. Although they are relatively free of embryonic egg material, it is good practice not to administer them to individuals known to be sensitive to eggs. In general they are injected subcutaneously in only 1 dose of 1 ml. or 0.5 ml., but sometimes they have been injected intracutaneously in 0.1 ml. amounts. In a small proportion of individuals systemic reactions, consisting of headache, malaise, or low grade fever, may develop for a few hours, and the site of injection may be sore. These reactions are apparently dependent on the amount of viral antigen injected which must be balanced between the quantity necessary to give adequate protection and that which gives undesirable reactions.

Dr. Jonas Salk,[15-17] of the University of Pittsburgh, in collaboration with the Commission on Influenza, has recently developed a vaccine containing a light mineral oil as an adjuvant. A number of studies in the military and civilian populations give promise that this method of preparation of the vaccine will produce more effective immunity. The studies have shown that the antibody responses appear to be higher and longer lasting, that smaller quantity of antigen is required to give this response, and possibly that it may broaden the spectrum of antibodies developed against the strains contained in the vaccine. These vaccines are still under carefully controlled study and are not yet available for general use. However, they are of such promise that they should be carefully studied in man. Also, it remains to be demonstrated that adjuvant vaccines are actually effective in reducing the incidence of disease and that they are superior to the widely used aqueous vaccines.

The reasons for the use of influenza vaccines in practice or in public health activities are as follows. In recent years influenza still remains a significant problem because of the widespread prevalence of the disease during the winter months and an appreciable number of deaths. An effective vaccine would be of great use in preventing some of these deaths, particularly in older age groups in which there is the greatest risk to individuals with concurrent cardiovascular-renal or pulmonary disease. A second reason for the use of vaccine would be to decrease the illness and subsequent loss of productive activity in all ages. This would be particularly felt in certain essential occupations, such as military personnel or communication and transportation workers, when, because of the epidemic characteristics, many individuals would be attacked over a short period of time. Many industries are now encouraging vaccination programs among their employees and last winter overseas military personnel were vaccinated, although apparently too late to reduce the incidence noticeably. Whether or not children should be vaccinated would depend on the judgment of the pediatrician or family physician. However, the low fatality rate in children even in 1918 and the usually benign course of the illness make one hesitate to advocate extensive vaccination in children with the products now available commercially.

It should be emphasized that vaccination against influenza cannot be expected to protect against the noninfluenzal diseases such as the ordinary bronchitis or the common cold, the etiologies of which are probably diverse and certainly obscure. It is this group of noninfluenzal illnesses, particularly in children, which accounts for the vast majority of respiratory illnesses ordinarily encountered. Influenza vaccination does not give complete protection to all individuals even though immunization is done with current strains, possibly because of differences in immunity responses among individuals. In short, one should not expect too much of this method of prophylaxis at the present stage of development. Nevertheless, every indication is that, with continued research on the questions of pathogenesis and immunity, improvements in the composition of the vaccine, and evaluation of its effectiveness, eventually a dependable vaccine will be available to help meet the problems arising in the control of this disease.

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AGAMMAGLOBULINEMIA (CONGENITAL ABSENCE OF GAMMA GLOBULIN)*

Report of a Case

COLONEL OGDEN C. BRUTON, M.C., U. S. A.

Chief, Pediatric Section, Medical Service, Walter Reed Army Hospital, Washington

REPORT OF CASE

In 1946 a $4\frac{1}{2}$-year-old boy was admitted to our hospital with a febrile illness and findings suggestive of osteomyelitis of the left femur. Four years later, after many serious infections, we were able to report for the first time the true nature of his disease, congenital absence of gamma globulin or agammaglobulinemia.[1]

The family history, including 1 sibling, and past history were entirely normal. He was well until two days before admission when he had a shaking chill followed by fever. His family physician prescribed sulfadiazine, and the patient continued febrile after 24 hours and complained of severe pain in the left knee joint. On admission he appeared acutely ill with a temperature of 102°F. There were no other significant findings except those related to his left knee, which was tender and painful on attempted movement. His white blood cell count was 16,000 with 88 per cent polymorphonuclears. A blood culture taken at this time was negative. There was a prompt response to penicillin therapy, and he was afebrile and asymptomatic within 48 hours. Because of suspected osteomyelitis, penicillin was continued for 30 days, although serial X-ray films revealed no bony change. Two weeks after discharge from the hospital there was a recurrence of chills and a temperature rise to 106°F. Blood culture at this time was positive for type 14 pneumococcus. Again, there was rapid and complete response to penicillin therapy. Within a short time the same series of events yielded blood culture positive for type 33 pneumococcus. On this admission each body system was studied systematically and extensively, with no clue being found to explain his repeated sepsis. Because of a history of otitis media, even though his tonsils and adenoids did not appear diseased, a tonsillectomy and adenoidectomy was done. The pathologist reported normal tonsillar and adenoid tissue. Subsequently he had liver and bone marrow biopsies reported as normal.

As may be seen from chart 1 the chills and fever recurred at least 19 times during the 4 years from 1946 to 1950. Other illnesses of a more local nature such as pneumonia, otitis media, and nasopharyngitis also occurred at frequent intervals. He was not seen on each of these occasions and sometimes had already been treated with antibiotics before blood cultures were taken. However, as indicated in the chart, blood cultures were positive in 10 different episodes for 8 different types of pneumococcus.

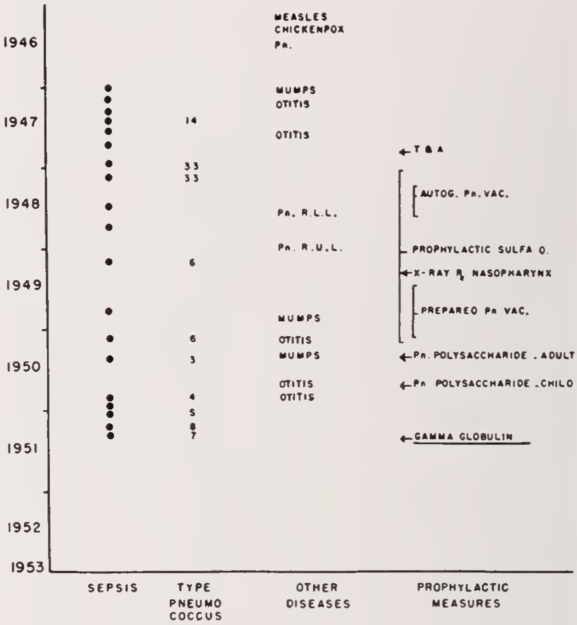

CHART 1. To show attacks of clinical sepsis, type organisms recovered from blood stream, other infections, and prophylactic measures employed.

A recurrence of sepsis with the same type organism suggested that the patient did not build antibodies for the pneumococcus, and an autogenous vaccine was prepared and given over a planned period. However, no antibodies could be found in his serum following such a vaccine. Prophylactically, sulfadiazine failed to act as a control. A second vaccine containing more types of organisms was given without demonstrable antibodies being found in his serum. Likewise, a commercial pneumococcal polysaccharide for both children and adults (Squibb's) was administered without antibody response. Naturally the question arose as to whether he could build antibodies for other organisms. He had a positive Schick test even though he had been given diphtheria toxoid in infancy and had 2 booster doses of diphtheria toxoid. Two additional diphtheria toxoid injections failed to reverse his positive Schick test. No antibodies for typhoid could be demonstrated after typhoid vaccine was given in the usual manner. As may be seen in the chart he was thought to have mumps on 3 different occasions. No complement-fixing antibodies for mumps could be demonstrated in his serum 22 days after the last attack which we observed. With this failure to produce antibodies it was suggested that one might expect some manifestation of this dysfunction in his serum gamma globulin. In this instance credit is due Dr. Monroe Romansky who suggested we obtain a Kunkel test for gamma globulin. Fortunately, we did not obtain a Kunkel test, because we have since learned that this particular test is not adequate for measuring low or absent gamma globulin. However, by electrophoretic analysis of his blood serum proteins it was found that he had a complete absence of the gamma fraction. He was then given gamma globulin (20 c.c.) as contained in concentrated human serum globulin, and this has been repeated at monthly intervals for the past 30 months. There has been no recurrence of his pneumococcal sepsis since that time and he has remained essentially a well and normal boy in other respects (figure 1).

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* Presented at the 24th ANNUAL SCIENTIFIC ASSEMBLY of The Medical Society of the District of Columbia, October 5, 1953.

Fig. 1. Patient shows normal growth and development in spite of his frequent severe infections.

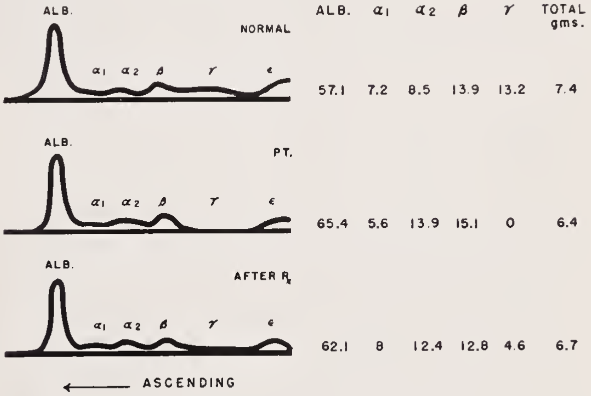

Chart 2. Reproduction of a normal electrophoretic pattern and that of the patient before and after administration of gamma globulin. Fraction protein values reported in relative per cent.

Chart 2 is a representation of a normal electrophoretic pattern and that of the patient before and after treatment with gamma globulin. It may be seen that there is no rise in the gamma area in the patient's curve. The total protein and A/G ratio are normal. After administration of gamma globulin there is a small but measurable amount present as represented by the slight rise in the gamma area.

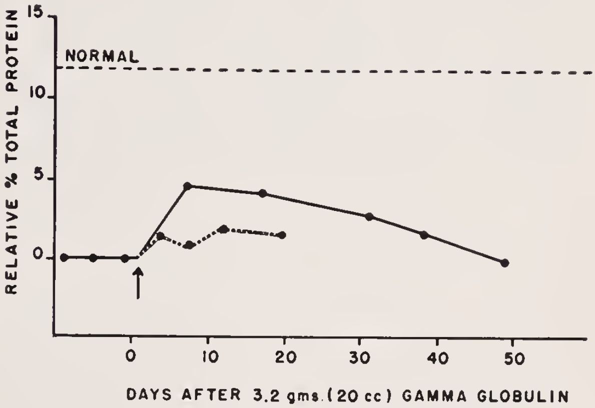

Chart 3. To show gamma globulin measurable in serum by electrophoretic analysis after 20 c.c. globulin administered. (Broken line as reported from another laboratory.[2])

The gamma globulin in the patient's serum was measured at weekly intervals following administration, and it was shown to gradually disappear over a period of 6 weeks as demonstrated in chart 3. This surprising finding has also been confirmed in another laboratory.[2]

COMMENT

With the demonstration of the absence of gamma globulin and the apparent control of infection by furnishing gamma globulin, there seems little doubt of the existence of a direct relationship in this case. We do not know at this time whether this represents an acquired disturbance in gamma globulin synthesis or a congenital defect in the mechanism. We have in favor of the former the fact that he lived 4½ years without serious infections. The more likely is a congenital defect of plasma proteins, analogous to hemophilia or afibrinogenemia, which has not been previously recognized because specific methods for the detection of serum gamma globulins were lacking and because the severe infections contracted by such children were fatal prior to the era of chemotherapy.

No other case of agammaglobulinemia has been reported in the literature. Many clinics, however, have now recognized 1 or more cases of this disease. Dr. Charles Janeway and his group[3] at the Children's Hospital, Boston, Mass., reported at the Association of American Physicians, Atlantic City, May 5, 1953, that they had collected 5 cases of their own and knew of 5 to 8 additional ones from other clinics. All of these were characterized by early, severe, recurring infections and the absence of gamma globulin. No female patient had been known to have this condition. There was only the suggestion that the disease was familial when the mother of a patient gave the history of having 5 brothers all dying of infection at an early age.

It appears then that a newly recognized disease has been described which is characterized by severe, recurring infections at an early age in males, transmitted by females, representing an hereditary defect of protein synthesis in which gamma globulin is absent although the total protein and A/G ratio are normal and which responds to therapy with gamma globulin.

Agammaglobulinemia should not be confused with conditions in which there are temporary or secondary derangements of the serum proteins as in the nephrotic syndrome, although the susceptibility to infections in nephrosis may well be due to the low gamma globulin found in this disease. Neither should this report suggest that gamma globulin be used as a panacea in prophylaxis. In patients with congenital absence of gamma globulin, however, it appears to act specifically as does insulin in diabetes and vitamin B_{12} in pernicious anemia.

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RHEUMATOID ARTHRITIS-LIKE SYNDROME DURING APRESOLINE THERAPY

Report of a Case

VIRGINIA P. BEELAR, M.D.

Clinical Instructor in Medicine, George Washington University School of Medicine

APRESOLINE (1-hydrazinophthalazine) hydrochloride, an agent used for its effects in hypertension, is believed to inhibit vasoconstrictive impulses through a central action on the nervous system. Effectiveness of this agent in patients with neurogenic hypertension failing to benefit from lumbodorsal sympathectomy would indicate inhibition of a pressor material of cerebral origin, possibly serotonin or cerebrotonin. In addition, other humoral substances may be inhibited, such as angiotonin, vaso-excitor material, perhaps pherentasin and other undetected entities. Adrenergic-blocking action is only moderate.

Numerous side-effects have been described, only occasionally of sufficient annoyance to necessitate discontinuance of the drug. In a test series of 103 patients 12 per cent of 71 experiencing side-effects had a grippe-like syndrome with malaise, pains and aches in muscles and joints, and with fever in 5 per cent, mitigated by salicylates.[1] Syndromes resembling rheumatoid arthritis and lupus erythematosus have been recognized only recently,[2, 3] with no published reports available at the time of this writing. This complication has been noted only on very large doses over long periods of time, i.e., 600 mg. to 800 mg. for 6 to 18 months. The following case is of interest in that it manifested arthritis which appeared on a low dosage of 100 mg. daily for less than 6 months.

REPORT OF CASE

J. H., a white woman, was seen first in March, 1950 at the age of 47 years, complaining of generalized, constant, pressure-type headache of several weeks' duration associated with mental "fogginess" and difficulty in thinking. For 4 years she had had throbbing, unilateral headaches for the week prior to menstruation accompanied by considerable generalized swelling. A physician advised her 2 years ago that she was hypertensive. Pregnancies in 1939 and 1941 were complicated by hypertension; the second was terminated at term because of albuminuria. A sister and aunt had hypertension. The patient had extreme hostility toward this sister, who is older, unmarried, domineering and critical of the patient's management of the household, where the sister stayed when unemployed. She expressed severe resentment and hostility toward a stern, vengeful father whom she had not seen during her adult life. She had experienced frequent attacks of "indigestion" characterized by gaseous abdominal distention and lower substernal distress following dietary indiscretions. Lately she had had some pain in the left hip brought on by inactivity with nocturnal radiation down the lateral aspect of the thigh. A previous attack of hip pain had occurred 12 years before during residence in a damp climate. A history of allergic manifestations could not be elicited, but both children suffered considerably from dust and pollen sensitivities. The patient had been moderately overweight for 25 years.

Physical examination revealed the weight to be 173 pounds, the temperature 37°C., the pulse rate 120, the blood pressure 230/130 (L), 230/120 (R), flushed face and neck, grade I retinopathy, geographic tongue (chronic), coldness of the hands and feet, moderate varicosities of the lower extremities, and signs suggestive of early cardiac insufficiency not subsequently elicited. Careful examination of the muscular and osseous systems revealed no significant abnormalities. Urinalysis, routine blood cell count, and blood urea nitrogen were within normal limits. The specific gravity on the Fishberg test did not exceed 1.025 on 2 occasions. The following week the blood pressure was 240/120, after which it gradually subsided with disappearance of headache and mental confusion on sedation, low-salt, low-calorie diet, ammonium chloride administration and psychotherapy.

On tetraethylammonium chloride, 2 ml. intravenously, the resting blood pressure fell from 160/92 to 125/80. Although an occasional normotensive reading was obtained during the following 2½ years, the usual office blood pressure was about 170/100. The weight loss was gradual to 137 pounds but was not fully maintained. In December, 1950 an acutely inflamed gallbladder containing 2 large calculi was removed. Continued conflict with the sister and several grave illnesses in the patient's family made this a period of considerable stress. Muscular symptoms of minor degree were present occasionally but not of such intensity as to need treatment.

Apresoline in recommended graduated dosage was begun, January 5, 1953, and a moderately severe headache was noted during the first few days. On 100 mg. daily considerable generalized edema was observed, which was later benefited by the addition of an antihistaminic. Since a therapeutic effect was achieved, with normotensive blood pressures (usually 130/70), the dose was not increased. On May 25 the patient experienced pain and stiffness in the right hip of sufficient severity to make locomotion impossible. This responded to heat and salicylates but was followed by pain and stiffness in the knees, feet and hands, marked muscle stiffness particularly on arising, and severe fatigue not relieved by rest. Examination on July 7 revealed tenderness of all proximal carpal interphalangeal joints with a spindle-shaped enlargement of the right index finger characteristic of that seen in rheumatoid arthritis. In addition there was tenderness over the right sacro-iliac joint and bilateral tenderness and crepitation of both knees with some effusion but no warmth of the left knee. The corrected sedimentation rate was 28 mm. per hour. An unequivocal diagnosis of rheumatoid arthritis was made. Joint symptoms gradually improved despite continuance of Apresoline, but a feeling of muscular weakness and aching persisted. Examination on August 18 surprisingly enough revealed disappearance of the swelling of the right index finger. The patient was advised to discontinue Apresoline gradually. Complete disappearance of fatigue, muscular and articular symptoms followed promptly, and she felt "fine." Reëxamination of the articular system on October 27 revealed no articular abnormalities except slight enlargement of the left knee with crepitus, suggestive of hypertrophic changes. Unfortunately, a sedimentation rate of 33 mm. could not be evaluated at this time, since the patient was convalescing from a severe middle-ear infection. The blood pressure had returned to 174/100.

COMMENT

Certain side-effects of Apresoline therapy, notably headache, lacrimation, conjunctival injection, nasal stuffiness and localized edema, are clearly of a hypersensitivity nature and are believed due to an antihistaminase-like action. These symptoms can be modified or prevented by concurrent administration of an antihistaminic agent. Fever and skin rash have also been observed; the former is present in some of the rheumatic reactions. The rheumatoid-like syndrome observed in this case is apparently typical of that seen by others. Even assuming a rheumatic diathesis in this patient, the Apresoline unquestionably precipitated acute manifestations. Clinically this resembles rheumatoid arthritis rather than the arthritis of other drug reactions or serum sickness. No similar effects have been observed with ganglionic-blocking agents or following lumbar sympathectomy. On the other hand, sympathectomy has been found of no value in the treatment of rheumatoid arthritis. The use of a ganglionic-blocking agent prior to the administration of Apresoline has been reported as preventing headaches and other side-effects. The arthritis would appear to follow a systemic or central action, either neurogenic or, more likely, a secondary humoral effect. Comprehensive endocrine studies would appear to be indicated.

Proponents of the hypersensitivity theory of rheumatoid arthritis should find additional evidence to support their views from these cases occurring along with a host of other hypersensitivity manifestations. If this occurrence of rheumatoid arthritis is fully substantiated Apresoline will represent the first chemical agent capable of producing not only the gross clinical changes of the disorder but also the constitutional manifestations. As such it may open an entirely new and exciting field for clinical investigation.

SUMMARY

A case of a rheumatoid-like syndrome occurring during short-term, low-dosage Apresoline therapy is reported.

The possibility of a new field of clinical investigation in rheumatoid arthritis is presented.

(Continued on page 696)

DEPRESSION

Some Dynamic and Clinical Features of Depressive Character Defenses, Psychoneurotic Depression, and Suicide*

HENRY P. LAUGHLIN, M.D.†

Assistant Clinical Professor of Psychiatry, George Washington University School of Medicine

THIS discussion is concerned primarily with depression as seen in the psychoneuroses. I shall discuss certain character traits as seen in the depressive personality which may develop as equivalents of depression, prodromal to depression, or which may be formed as defenses against depression. Following a quick look at the reaction of grief, we shall study psychoneurotic depression. Some available figures as to incidence will be presented and the dynamics of depression reviewed. This will be followed by a brief description of the clinical picture and the mention of some points in differentiating neurotic depression from psychotic depression. Consideration of manic-depressive psychosis, involutional melancholia and depression in other psychotic states is beyond the scope of this paper, although certain thoughts in relation to personality traits and dynamics will also have some validity in these conditions.

Reactive depression, anxious depression, and the curious depression sometimes seen following the achievement of a goal, the success depression, will be briefly covered. Following presentation of a few statistics and some dynamic factors about suicide, there will be a short section on treatment.

Depression like anxiety is universal in human experience. Depressed spirits have been recognized during most of recorded history, or perhaps since Adam's sadness and dejection, following his expulsion from the Garden of Eden! The partially discarded term melancholia (literally "black bile") is continuing evidence of ancient influence from the times when depression was believed due to a disorder of bile. However, knowledge of depression until very recent times was limited to descriptive and empirical data. It was not until 1911 that the first dynamic formulations were offered by Abraham.[1] Following this noteworthy contribution, an increasing number of studies have offered new advances and refinements of existing theory. While significant contributions continue, there exists today a large and solid foundation of rather generally accepted data concerning the dynamics of depression.

The sources of depression are more complex and will require a more detailed examination of the dynamics involved than we have found necessary in our study thus far of the psychoneurotic manifestations. Thorough understanding of the dynamics and the psychopathology of emotional illness is often very difficult. Should this prove true in the current discussion, the interested physician or student is urged to review earlier articles of this series in sequence, beginning with "Anxiety; Its Nature and

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* This material was presented in part at Walter Reed Army Hospital, Forest Glen Section, October 22, 1953. This is the fourth in a series covering the psychoneuroses. The next article, entitled "Psychiatric Aspects of Fatigue," will appear in the January issue of the MEDICAL ANNALS.

† In the private practice of psychiatry and psychoanalysis, Chevy Chase, Maryland; Consultant in Psychiatry to Walter Reed Army Medical Center; Consultant to Office of the Secretary of the Department of Health, Education and Welfare; Research Consultant to U. S. Psychological Strategy Board.

Origins" in the August ANNALS. Repeated reading of a difficult passage may also increase its meaningfulness.

Not only is depression a universal phenomenon, but the experienced clinician sees ample evidence to suggest that the presence of morbid depression is perhaps more widely prevalent than commonly realized. Perhaps I can illustrate this partially by an experience while lecturing to a postgraduate medical class. The 41 unselected physicians were of mixed ages and included people from most of the specialties. They were asked to fill out anonymously a questionnaire which included questions as to whether they had had personal thoughts about suicide or serious consideration of suicide. Of the group, 30 answered "yes" to the first question and 11 to the second. Errors here are likely to be on the low side.[2]

The feeling of depression even when strongly apparent to the patient may pass unnoticed by others. The patient tends to retreat from his normal activities and interests. Since he loses inclination and ability to undertake new interests, projects, or activities, even in his own behalf, it is not surprising that he is less likely to seek help from a physician. This alone complicates greatly the recognition of depression and taxes the diagnostic acumen of the physician. He must be on the alert in order to notice or elicit signs or symptoms of depression in his patients.

From the medical, social and humanitarian standpoints the physician has a great responsibility in the area of accurate diagnosis and adequate treatment for depression for three cogent reasons:

1. The predisposition to the development of depression exists among society's most useful people, the hard-working, reliable, serious, conscientious, and responsible ones.

2. The response to adequate treatment is relatively favorable. The same traits which may accompany the predisposition to depression are useful when applied in the work of treatment.

3. Efforts by the physician to train himself in the early detection of depression and in facility of referral to expert specialist care will pay substantial dividends in results and personal satisfaction. In many instances the depressed patient can be restored to his pre-illness level of effectiveness, or better.

Since there is a universality of experiencing both depression and anxiety, we might anticipate that depression may occur to some degree in many emotional illnesses. This is correct. Depression like anxiety is a common feature in neurotic illness. There are also, however, rather clear-cut cases of psychoneuroses in which the predominant feature of the illness is emotional depression. In these cases the most suitable diagnostic classification is that of neurotic depression and we will be guided accordingly in our present discussion.

SOME CHARACTER DEFENSES AGAINST DEPRESSION: THE DEPRESSIVE PERSONALITY

In the study of conversion reactions in the November ANNALS it was observed that prior to the development of actual illness, manifestations in the character or personality of the patient existed which served, in less obvious form, purposes similar to those achieved by the major symptoms of hysteria.[3] This is likewise true in depression.

The personality traits which are most commonly seen to develop in association with depression may be placed in three groups. One group is clearly depressive and includes overseriousness, dependability, somberness, studiousness, overconscientiousness, restricted sense of humor, and lowered spirits. These traits attempt to serve a similar function to actual depression in aiding the repression and concealment of hostile aggressive impulses.

A second group of traits is related more to the development of traits which deny hostility and develop by the process of reaction formation. This group includes compliance, conciliation, overpoliteness, subservience and obsequiousness. A third group of traits are those of the obsessive-compulsive category, including meticulousness, concern with detail, rigidity, compulsive behavior patterns, and parsimoniousness.

Usually character traits are overlapping. Elements of several are often present in varying relative importance. We do not set up absolute standards for the character defenses associated with depression, but rather note the ones most frequently seen. Striking and important personality characteristics develop as the result of internal needs and serve important psychologic purposes. The presence of the third group of traits illustrates the close relation of personality structure in the depressive and the obsessive neuroses. Somewhat typical sets of character defensive traits can be described in the obsessive personality, the hysterical personality, and the depressive personality.

In the depressive personality we frequently find high personal standards or goals. Depression often develops in able, intelligent and sophisticated people. Although 2 cases were recently reported to me with I.Q.'s of 76 and 80, an I.Q. of over 110 is more likely.

As the reader glanced over the traits outlined above, he may have noted the personal and social value of many of them, at least in moderation. The serious, conscientious, hard-working, dependable person who maintains high personal standards is a social asset. Depression is indeed an emotional illness to which many of our socially most useful and productive people are subject.

In assessing the presence or the level of depression, comparison with a hypothetical base line to indicate an average or normal level of spirits is useful. So long as the character defensive traits of the person with a depressive diathesis adequately serve their purpose the status quo of adjustment is maintained. External and internal factors, however, may result in their being no longer adequate. As a result they may become stronger if the stress is gradual, or a depression may develop as part of the urgent need to continue concealment (from the world and from oneself) of aggressive and hostile drives. These threaten to escape repression and control, a catastrophe defended against by the development of the depressive character traits.

Overdevelopment of the traits outlined can disrupt personality integration, impair effectiveness, interfere with interpersonal relationships, and decrease one's ability to secure satisfaction in living. The following case is presented in illustration.

Case 1. A 41-year-old corporation-tax consultant originally was interviewed as a possible candidate for character analysis on the recommendation of his brother who had himself gained considerably from intensive treatment in another city. Upon examination he was mild-mannered, overly polite, very serious, and compliant. He stated he was inclined to moroseness and low spirits, was overly concerned with detail, and usually carried too great a burden of responsibility. He wanted help with these traits; he felt that his interests were too constricted and that he was unable properly to enjoy life.

During treatment it became clear that he maintained perfectionistic standards. He was the victim of his own harsh conscience, which had taken over the highly critical attitudes toward himself of his judgmental and stern parents. As one might expect, he required considerable satisfactions from outside himself in view of early deprivations and a deficiency in internal sources of supply.

A typical psychologic element was the presence of strong ambivalence. The great amount of aggression he had felt in response to early deprivations in childhood had been too dangerous. It consequently had been repressed from awareness. This set up a pattern for future reaction so that most later hostile feelings were also repressed. His defensive character traits developed in the service of repression and denial. Outwardly he was calm, mild-mannered and compliant and denied having any hostile feelings. These attitudes denied outwardly to the world and to himself the presence of his very considerable hostility. His original rejection of his hostile feelings in childhood was based upon the fear of retaliation from parents and the danger of harboring destructive aims toward the vitally necessary object of his own dependence. As life progressed, his hostile impulses toward people were inverted. They were replaced by traits actually opposite to his hidden feelings.

He was vulnerable to depression as illustrated by his overreaction in depressive fashion to loss, disappointment, frustration, or failure to achieve a cherished ego ideal. He lacked the elasticity to adjust his goals in line with reality. Although he was successful to a fair degree, his necessary preoccupation with detail decreased his ability to delegate responsibility to others, while his handicapping somberness was an additional impediment. Further, the diversion of potential energy to serve essentially uneconomic internal needs decreased the amount available for more constructive external endeavors.

In rapid résumé of the results of his intensive treatment he became able to gradually reappraise his goals and to effect an adjustment of harsh and punishing superego forces. He became able to face the aggressive side of his ambivalence and to handle it better. As a consequence of these gains and other insights, his ability to maintain effective interpersonal relationships, familial, social and professional, improved substantially. Life became fuller and more satisfying. These results, however, were not easily achieved since his treatment required more than three years.

The harsh, overdeveloped conscience is part of the personality diathesis in depression. Although this is punitive in seemingly masochistic fashion, there is a deeper sadistically punitive aspect. As will be seen later, symbolic expression is gained for the ambivalent hostility via sadistic punishment of the internalized person.

The evaluation of depression must be made from the hypothetical base line referred to earlier. It can be noted that many individual and cultural factors will influence the location of such a "normal" line. Thus, a number of subgroups in our culture appear to foster personality traits similar to those described. These might have less significance than if the same traits were present in a person from another subgroup. For examples, there are the impassivity, somberness and seriousness of American Indians, and the taciturnity, stoicism and dourness of native New Englanders. These traits may be contrasted with the volatility of other ethnic or cultural groups. In view of the universality of depression, one must certainly agree with Phyllis Greenacre[4] that "it is certainly the intensity, the excessive duration and the domination of the organism by the affect, rather than its occurrence, which is pathological." In other words, depression is pathologic when it is present as substitutive, overdeveloped character defenses, or present as neurotic or psychotic depression, with resulting interference with living.

As in case 1, the depressed personality is likely to be handicapped, the degree depending upon the relative strength of character traits. There is likely to be restriction of imagination and speculative ability. He is conservative and enjoys a limited freedom to try new things, to take chances or risks. The result is a constricted life and a limitation of ability to enjoy it. These traits greatly handicap and prolong the character analysis of the depressed personality but again, as in case 1, are offset to some extent by traits of sincerity, dependability, conscientiousness, etc., which are great assets to treatment.

As might be expected with absorption of energy in the desperate attempts to keep censored feelings concealed from recognition and to keep them controlled, there is less available for libidinal attachments and sexual outlets. Usually one finds decreased sexual activity, sometimes almost a seeming absence of all sexual interests. Often this is accepted as a matter of course by the patient, who does not only fail to complain of this to his physician, but from whom this information is often gained only by pointed questioning. On the other hand, sexual preoccupation and overactivity occacasionally may be seen as a reaction or defense. Again the amount of diminution of the level of interest and activity is highly variable.

The following case illustrates lifelong restriction in living where definite character traits were present which were typical of the depressed personality. These, however, had served as adequate defenses until middle life. This case also illustrates the general increasing vulnerability to depression rather frequently noted in this phase of life, as character defenses may prove less adequate, and as added stress may be the increasing recognition that cherished goals in living are not going to be realized.

Case 2. A 46-year-old associate professor first sought help from his referring physician for insomnia. The alert doctor found apparent relationships in onset to some recent disappointments in both personal and professional life and noted that the insomnia consisted of waking earlier than usual. He correctly suspected depression, although there had been little in the professor's appearance or complaints to suggest this diagnosis initially.

Upon consultation the patient was observed to be of a very serious mien. He spoke in slow and deliberate fashion without very much spontaneity of ideation or change in facial expression. He was devoted to his work and was dependable, hard-working, sincere, overconscientious, and overconcerned with detail. Some of the usual character traits associated with a diathesis for depression were present, having developed as desperately needed character defenses to aid in his mastery over intolerable and threatening aggressive and hostile drives. Later study revealed intolerance of any error in himself or of any failure to measure up to some expected personal standard of performance. This evidence of a harsh superego was borne out further in his extension of an overcritical attitude toward his students, colleagues, and family, with the sources traceable largely to his own harsh judgmental father.

The defensive character traits had been erected mainly in an attempt to conceal and deny the aggressive elements of his actual strongly ambivalent feelings. Instead, however, they gained concealed symbolic expression in destructive fashion as the self-limiting, rigid, and depressive character elements. In this case there was also considerable repression of sexual drives, as though any kind of instinctual drive or affectivity was threatening and dangerous to him. His character defenses had served their purpose as reinforcements to the control of forbidden drives until the last year, when it began to be clear that he would miss some of the marks in life for which he had aimed. This was confirmed by the selection of a new man for the vacant professorship, a post which he had wanted. Also, his daughter had married a man he considered to be beneath her station.

With these disappointments* the whole defensive character structure was no longer able adequately to handle repression and control. Early signs of depression appeared as reinforcements to character defenses which were no longer adequate. Ironically enough, while parts of the character structure were indeed responsible for his success (serious application, devotion, conscientiousness, etc.), other aspects were actually in turn responsible for his failures (intolerance, overconcern with detail, constant relative low level of spirits, critical attitude toward others, difficulty in tolerating change, and interferences with close personal relationships).

Psychoanalytic treatment in this case was moderately successful. A major depression was likely averted. In addition it was possible to secure some healthier realignments of super-ego (conscience), ego ideals (goals), and ego (the self or "I"). In this case it was not deemed feasible or possible to secure complete analysis of some of the rigid character defenses which had served so well through many years and were clung to in understandably tenacious and desperate fashion. A recent interview indicates maintenance of a kinder attitude toward himself and others, an increased ability to tolerate frustration, and healthier handling of hostility in the years since termination of intensive treatment.

I believe this case may help us understand the increased vulnerability to depression as middle age advances. We may look at it from the standpoint that the ego becomes impoverished through the vicissitudes of internal conflict and the constant maintenance of defenses against threatening disowned hostility and aggression. There also may be less ability to tolerate loss, frustration and disappointment. When a considerable discrepancy between goals in life and the ability to achieve them exists, the likelihood of disappointment increases. This discrepancy may increase with declining personal resources. Furthermore, with a depressive diathesis, the pathway for a response by depression already exists. Then too, there is the impact of awareness of declining physical vigor. When strong competition exists toward various goals, there is an added handicap. Finally, in persons where there was an early failure of (largely oral) narcissistic supply with increased or increasing dependence for satisfactions from external sources, there is a corresponding increase in ego vulnerability.

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* From a more technical psychoanalytic view, these disappointments constitute a failure of narcissistic supply from external sources. The ego in early life was deprived of largely oral narcissistic supplies and not only developed a primordial pattern of depressive reaction, but likely became further impoverished by the necessity of maintaining defenses, and by the absorption of punishment from the harsh super-ego. As a result there is greater dependence upon external sources of supply since internal ones are lacking and the ego is more vulnerable to failure from the external sources. Disappointments are accordingly of greater moment, as threatening aggressive retaliatory drives become closer to conscious awareness. Depression ensues as a last ditch psychologic attempt to maintain control.

As we have seen, the depressed personality may likely offset the advantages to himself of certain of his desirable personality traits by other disadvantageous facets. As another example there is frequently a need to be critical of others as well as of himself. This is an attempted way of bolstering his own battered ego, by building himself up comparatively, as he tears others down. Because of their awareness of his critical attitudes often despite concealment, as well as because of his rigidity and somber nature, other people feel less comfortable around the depressed personality. In contrast some people may even respond to the implicit dependency appeal of depression in keeping with their own internal needs.

We earlier noted the formation of certain character defenses by reaction formation (the mental mechanism of the reaction of the opposite). A prime example of this kind of reaction which will be familiar enough to some readers with military experience is the overly correct service man who makes a ceremonial point of saluting and in other ways overdoes the showing of "respect" to his officers. To a major extent he is unaware that his exaggerated military correctness is a way of reinforcing control over his real resentment of authority and actual hostility. Although this behavior may to some extent nettle his officers, how is it possible to reproach him? One might interpret this behavior as saying in effect, "I really hate your guts and don't respect you at all, but this I must conceal not only from you, but even from myself, so I show (actually go through the motions only of showing) outwardly every manifestation of respect. If I obviously respect you so much, you (and I also!) can't possibly be aware of how hostile I really am." Where hostility is concealed or buried, this may be imperfectly done and may be discernible directly to perceptive people, or intuitively so, with resulting impairment of relationships.

A frequently observed inability to accept or to face criticism can be understood in the light of the large burden of self-criticism from a punitive superego. The burden is already too heavy to add more from outside. Infrequently there is increased use of alcohol, which might at times be looked upon as an attempt to drown hostility, to replace oral narcissistic supplies, to ease the burden of self condemnation and reproach, etc. Unfortunately, the tendency is toward establishing a vicious circle as new self-reproaches follow the alcoholic indulgence.

In summary, we may note the predisposition toward depression in the overconscientious, serious, compliant, subservient, obsessive, or overly agreeable individual who is driven by the demands of his punitive super-ego (the internalized parental authority), who finds recognition of his own hostility too threatening, and who is overly dependent upon external sources of satisfaction, leaving him more vulnerable to disappointments and loss. The depressed personality possesses character defenses which result in a person who may operate more or less constantly on a depressed level, and who may be regarded simply as gloomy or overserious. When one thinks of a normal range of swings of mood taking place in waves, with peaks and shallows, the depressed person is mostly below the average baseline. This may be part of the character structure, and may not necessarily be pathologic. This tendency, however, restricts enjoyment in living and often limits social relationships. These people do not often themselves seek therapeutic help, although benefits from character analysis may be substantial. The close relation of character structure in the depressed personality and in the obsessive personality will become more apparent when the obsessive character defenses are considered. Careful consideration of the dynamics of depressive character trait formation will help us understand the very urgent necessity for their development and existence.

GRIEF STATES

Abraham[5] noted in 1911 that "anxiety and depression are related to each other in the same way as are fear and grief," a comparison that points out the essentially external nature of the precipitating causes in fear and in grief as opposed to the more complex and internal factors entering into the basic ego reactions of anxiety and depression. In grief the loss is objective and external. In depression the important loss is emotional and more complex. In his classic paper "Mourning and Melancholia," Freud[6] in 1917 was able to distinguish clearly between normal grief, as the response to the loss of a loved person, ideal or abstraction and melancholia (depression), where the principal differentiating feature is that "the fall in self-esteem (invariably present in depression) is absent in grief; but otherwise the features are the same."

Thus we may regard grief as the normal expression of sorrow and bereavement which follows the death of a loved one or other significant loss. The amount of grief in the mature personality is directly related to the amount of loss felt. It is self-limited and gradually subsides within a reasonable time. A grief state merges into a pathologic depression when the duration of the grief response to bereavement is more than one might ordinarily expect. Its occurrence indicates the pathologic complex of depression, the dynamic formulation of which I shall shortly attempt.

There are cultural influences which may exert unfavorable effects in the manner in which we deal with grief. Our present culture regards it as desirable to remain calm and emotionally restrained. An emotional display is frowned upon, and emotional stoicism is only too often regarded as a sign of strength. Since these attitudes simply encourage both conscious suppression and repression (which do not at all necessarily equate greater maturity), the result may have unfortunate consequences on emotional health. Thus, a social premium is placed upon suppression of grief, a fact which can contribute to emotional illness. The following example illustrates how these cultural influences can unfavorably influence response to grief.

Case 3.[7] A 21-year-old girl presented symptoms of a borderline psychosis and had to leave her job. The history disclosed that her father died 10 months before quite unexpectedly. The mother, although very grief-stricken herself, felt a need to hide her grief from the patient and her younger sister, apparently in the belief that she was protecting them. This in turn promoted suppression of grief feelings in the daughter.

The patient, partially because of this and partly because of her own personality traits, repressed most of her own grief. She displayed outwardly and actually "felt" little sorrow. The psychosis was resolved in a matter of weeks when she became able, under the supportive influence of therapy, to express, discharge, and, in effect, relive her terribly intense feelings of loss and deprivation.

This is of course a vastly foreshortened account of the case and presents only one small aspect of many complex factors in the dynamics. It is noteworthy, however, that following this abreaction of intense grief and resolution of the incipient psychosis, a systematic psychoanalytic study became feasible and many important insights were worked out.

Grief states may be regarded simply as the extension of, or the increased intensity of grief in response to bereavement. Here normal grief may emerge into the pathologic. The loss of a close person may precipitate a depressive reaction of various degrees of severity. The deceased person, the circumstances surrounding the death, and the relationships which were present between the dead person and the bereaved one may "kindle" various emotions which have unique and unconscious consequences to the mourner.

PSYCHONEUROTIC DEPRESSION

To this point our discussion has centered on depressive character traits which serve a similar defensive function to actual clinical depression. Accordingly, they may be regarded roughly as psychologic equivalents of depression. Thus the later development of depression may be forestalled by the formation of character traits. Depression develops, provided other usually predisposing external and internal factors are present, in the absence of the appropriate character defenses, or as an urgent reinforcement where existing ones are no longer adequate. The onset of depression is a last desperate attempt to maintain repression and control of threatening and disowned hostile and aggressive impulses, while at the same time allowing some expression in symbolic fashion as we saw in "The Conversion Reactions." Depression is also protective in function by attempting to prevent further uneconomic expenditure of energy in further pursuit of hopeless goals.

It is important for us to recognize the protean forms of expression that depression can take. Character traits as equivalents represent one major form. Others exist in many kinds of physical manifestations, excessive sleeping, boredom, and decreased ambition. George Gero[8] recently presented an interesting discussion of anorexia as a depressive equivalent. Further, as we shall see, there is a close relation between fatigue and depression. Depression is also seen as an accompaniment of physical illness in which it is possible to hypothecate a possible biologically protective function.

The person with a diathesis for depression gets into trouble when his goals are set and maintained higher than realizable, out of keeping with personal resources. The well adjusted person generally has adequate safeguards. He possesses the ability and the necessary elasticity to readjust his sights in keeping with the actuality of capacity. He is fortunately more able to tolerate loss and disappointment and is free of the characteristically harsh super-ego. Depressed patients are among the greatest sufferers in any medical situation. Regardless of medical condition, there is hardly a more miserable or suffering person than the tortured victim of an agitated depression. In this most desperate illness, in which there is overwhelming anxiety and depression, there is no psychologic morphine to bring relief as to the terminal cancer patient. Nothing can satisfy these patients, some of whom continue in a desperately agitated psychotic state for years. The suicidal risk is high.

Depression of psychotic depth ranks only after schizophrenia, mental disorders of the senium, and alcoholism in order of first admissions to mental hospitals. In 1949 there were 10,837 new admissions for manic-depressive psychosis and involutional melancholia, representing 10.4 per cent of total admissions. The median age was 52.9 for the involutional cases and 41.5 for the manic-depressives.[9] These figures do not give a complete picture of the incidence of depression which can be a major manifestation in many other forms of illness. I would also anticipate a higher rate for depression in private vs. public hospitals. A recent military publication[10] reports a survey of a group of psychiatric hospital inpatients in which 26.5 per cent of male patients had depression as a chief complaint and 17 per cent more had depression as at least the second major symptom, a total of 43.5 per cent. For females the corresponding figures were 24.7, 12.5, and 37.2 per cent.

Figures for relative frequency in non-psychotic cases are difficult to obtain. The last source included a study of "normal" persons in which in the men depression was the chief difficulty in living for 6.7 per cent, and the secondary difficulty in 8.5 per cent (total 15.2 per cent), whereas it was the primary trouble in 12.9 per cent of the women, and the secondary trouble in 5.7 per cent (total 18.6 per cent).

In view of the difficulty in locating figures showing the prevalence of depression, I have made an analysis of my private practice. My figures cover consecutive consultations over a 2-year period and consecutive patients in intensive treatment over a 4-year period. It may be noted that the total of 108 cases is a minute sample and that the existence of special factors in selection by referring physicians and patients could influence the results. My results are tabulated as follows:

Incidence and Relative Importance of Depression as Found in 108 Consecutive Cases Seen in a Private Practice

	1. *A minor factor*	2. *An important factor*	3. *The major factor*
66 consecutive consultations (2 yrs.)	44%	24%	32%
42 consecutive cases in intensive treatment (4+ yrs.)	24%	55%	21%

These figures are likely at not too great variance from those of a typical active psychoanalytic practice. They bear out the relative frequency of depression seen by the private psychiatrist. Combining columns 2 and 3 gives us totals of 56 per cent in consultations and 76 per cent in cases in treatment. Since depression is a major factor in suicide (the extreme in self-injury and punishment), statistics in this area, which will be cited later, are also of interest.

DYNAMICS AND PATHOGENESIS OF DEPRESSION

If the supply of love and affection is adequate in early years, the unhealthy ambivalence typical of the depressed patient will not develop. These vital needs of the child we do not believe are denied willfully, but in turn the parents, through insecurities and problems of their own, do not have it to give, or cannot give it. Further, and for the same reason, they cannot tolerate the hostility of the denied and frustrated child, who dreads retaliation and can only handle his rage by repression. In the oral phase of personality development the response to frustration is rage. This becomes ultimately a wish to devour. The infant recognizes that the object of its rage is also the cherished love object on whom he is totally dependent. He cannot attack or destroy this important figure, not only because of his own terrific potential loss, but also through the danger of retaliation and retribution. When this mechanism is of sufficient strength and the ambivalent feelings are not adequately handled, a primal depression develops. This establishes a pattern for future response in which, however, the ability of the individual to tolerate loss, disappointment or frustration varies widely.

We owe our understanding of the dynamics of depression to the early contributions of Abraham (1911,[1] 1916,[11] 1924,[12]) and Freud (1917)[6] and to later contributions largely by Rado,[13] Klein,[14] Fenichel,[15] Jacobson,[16] Bibring,[17] and others. Space and time do not permit detailing the important contributions of each. Their work, however, has resulted in our present view of depression as a specific ego reaction to loss or to an ego blow, to frustration and helplessness, to loss of, or serious damage to an ego ideal.

Depression is closely related to the conflicts arising from the frustrations of denial, loss and failure. In the resulting great ambivalence (the coexistence of opposing feelings) the person with predisposing personality features is unable to handle the hostile side. The aggression is literally inverted. It was Abraham[12] in 1924 who presented the important concept of the "infantile prototype" of depression, a primal depression of infancy in response to the vicissitudes of love and hostility. With the establishment of this prototype of depressive reaction in early life, the depression-prone person has developed a familiar psychologic path to follow when the early infantile pattern is reactivated by serious disappointments, losses, or abandonment which make take place in later life.

Not always is the person subject to depression consistent in his expression or inversion of hostility. This was dramatically illustrated in a case presented to me recently by Major Donald V. Leddy, MC, USA.

Case 4. A 34-year-old captain returned from a tour of duty overseas and after a few days at a new assignment was hospitalized for psychiatric study because of interference in his work from emotional factors. He was tense, anxious, preoccupied and showed diminished interest in outside things. He expressed mildly self-depreciatory ideas, such as doubts about whether he had done "a good job." It was not clear initially what the diagnosis was, although there were strong factors of anxiety present, and depression was suspected.

Under treatment he brought out the intense feeling he had upon learning his wife wanted a separation after his return to the States and that their relationship was not at all what he had believed it to be during his absence.

Amazingly, he had actually learned for the first time that she was 14 years older and had been married 4 times previously! For a few days he appeared better as he poured out intensely resentful and angry feelings. Then for poorly explained reasons he slowly lost his ability to express hostility, and concurrently signs and symptoms of depression increased. The self-depreciation became marked, as he wondered whether he had "lived up to his responsibilities" or if he had "misled" his men. These ideas, directed toward himself in a depression which deepened to psychotic level, can be seen to reflect clearly one aspect of depression (first pointed out by Freud[18]), the punishment of the internalized lost love object by the now "concealed" hostility. They actually represent secret condemnations of his wife for "misleading" him and for "not living up to her (marital) responsibilities."

Treatment continued with little apparent effect for about 2 weeks when he returned to outward ventilation of hostility. Concomitantly depressive features fell away. It was possible to continue treatment on an intensive basis for several months, during which time some important insights were gained. The officer became reconciled to the separation and eventually returned to duty.

The unusual feature of this case is the inverse relation of outward hostile expression and the level of depression, dramatically demonstrated over a course of approximately one month, as illustrated graphically in figure 1.

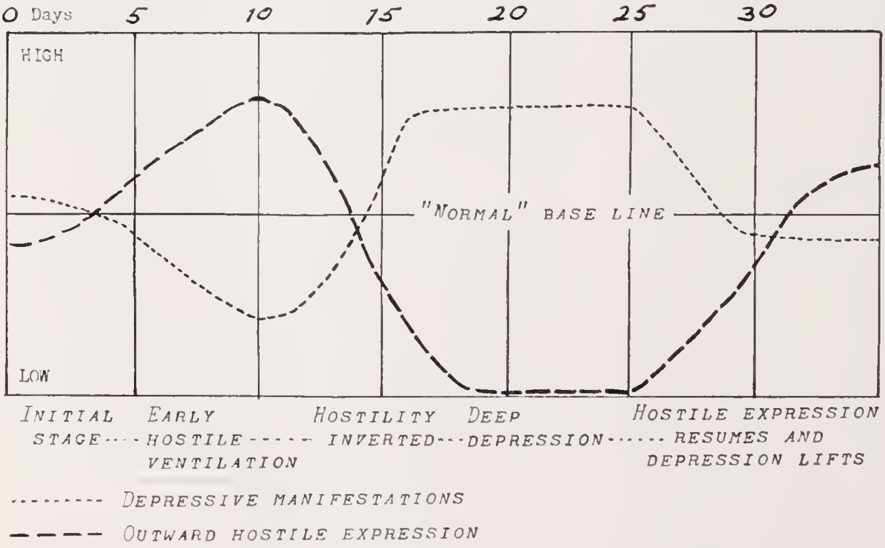

FIG. 1. Inverse relation of outward hostile expression and depressive manifestations as shown in case 4.

I have found it useful in teaching the dynamics of depression to refer to what I like to call the "primary" and "secondary" gains of depression. Although there is a similarity in our view here to the same more established concept as presented in our discussion of conversion hysteria, the primary and secondary gains or goals of the illness in depression are less apparent.

The primary gains of depression subserve unconscious needs. On the basis of our current knowledge of the dynamics of depression, these can be grouped in three classes:

1. Concealment of hostility: the denial and concealment of the disowned aggression and a last desperate effort to reinforce repression.

2. Punitive goals: (a) self-punishment by the harsh super-ego, sometimes in expiation of guilt, and (b) expression of inverted hostility toward the incorporated love object in concealed symbolic fashion.

3. The protective biologic goal: to prevent further uneconomic expenditure of energy and effort in pursuit of something clearly hopeless; restriction of the further depletion of the weakened ego. In addition, the lessened drive and fading interests decrease the possibility of conflict, as instinctual drives and demands became less insistent. The biologic function of depression might be likened to a physical counterpart, total exhaustion, where enforced physical inactivity prevents depletion of further physical energy beyond an already dangerous point. This process, intended protectively, gets out of hand in the severe depression to the potential point of inanition and death.

In a case studied intensively some years ago it was possible to identify elements of all three of the above.

Case 5. A 43-year-old scientist came under treatment for a severe depression essentially precipitated by his forcible recognition, after eight years of prodigious personal effort, that his most strenuous exertion was fruitless to salvage his alcoholic wife. He became despairing and hopeless when things went increasingly wrong despite his best efforts. When commitment became necessary for the wife, he could no longer avoid evidence of her cerebral impairment and the knowledge that any resolution was impossible. His efforts had been marked by unending devotion, patience and self-sacrifice. He had repressed all hostility against all variety of provocation.

His repetitive self-accusatory comments about his failures served his own overdeveloped super-ego. They also clearly reflected his symbolic hostile expression toward his (incorporated) wife (love object) toward whom he bore the deepest resentment for her failure in the marriage, failure to get well, and failure to respond to his efforts to help. The wife is not only the lost love object but the agent of frustration as well. By this intense censored hostility being outwardly directed toward himself, the attempt is to reinforce denial of the real object of his ambivalent fury—to reinforce repression. Finally the depression, with its great restriction of interest, activity and drive effectively blocks further pursuit of a fruitless endeavor. This man's depression was a last desperate attempt to conceal recognition of the disowned hostile part of his great ambivalence.

In the above case we can see the final surrender of the hopeless ego-ideal (goal)—the restoration of the alcoholic wife and the marriage. As this external source of narcissistic supply becomes clearly hopeless, we can see the secondary gain attempts of the illness. There is regression to oral levels and an appeal to dependence. The depressed patient says, in effect, "I am helpless. I must be looked after and need to be taken care of." He tries to secure love, attention, affection and tenderness partly because of felt deprivation and need, and partly as reassurance that his own aggression can be tolerated. So urgent and basic is this need that many of the more seriously depressed patients would, unlike hysterics, die without being able to lift a finger in their own behalf, even for food. The resulting requirement for forced feeding is not uncommon in mental hospitals. In regression to an oral level, the patient seeks attention, sympathy, love, affection and protection, a desperate appeal for narcissistic supply of which he has felt deprived. This occurs in deeper and less apparent, but actually not too dissimilar fashion from that which we saw illustrated in the secondary gain of the hysteric. This, the secondary gain in depression, usually relates to a regressive oral need and the attempt to produce desired effects on certain people. It, like other primary gains, is unconscious (out of awareness) and would, of course, be denied verbally by the depressed patient.

An example of the situational effects of the depressive illness in actually producing secondary gain might be briefly cited in illustration. In the following case the gain is substantial. It is achieved out-of-awareness, unconsciously.

Case 6. Following the blow of learning his paramour was pregnant, the young man involved developed a deep depression. The unwelcome news was a bitter blow to himself and he became caught in an intolerable conflict between his harsh conscience and his inability to face marriage. His secret fury and condemnation of the woman ~~girl~~ also had to be disowned. He was hospitalized for the depression and remained there several months. On one level his illness said in effect, "I'm sick and helpless and can do nothing; someone else, someone stronger must take over and solve this desperate problem which I cannot face." Actually this happened. The ~~girl~~ woman reached her own solution so that this particular intolerable situation no longer faced him. The patient slowly recovered.

Other secondary gains may include the avoidance through illness of an intolerable work or family situation. The effects on other people, such as punishing or depriving them (passive aggression) of love, affection, support, sexual satisfaction, etc., may be very important. The loss of sexual drive can also have deeper dynamic elements, representing part of the general forestalling of drives and acting as a protection of the weakened ego against additional possible conflict.

To my mind no one has better stated the dynamics of the sadistic part of the inversion of hostility than Freud[18] in his original paper "Mourning and Melancholia" as he cites the secret (and sadistic unconscious) satisfactions in the torment of the melancholiac and their relation to the similar process in obsessions: "The self-torments of melancholiacs which are without doubt pleasurable (provide unconscious satisfaction) signify, just like the corresponding phenomenon in the obsessional neurosis, a gratification of sadistic tendencies and of hate, both of which relate to an object and in this way have both been turned round upon the self. In both disorders the sufferers usually succeed in the end in taking revenge, by the circuitous path of self-punishment, on the original objects and in tormenting them by means of the illness, having developed the latter so as to avoid the necessity of openly expressing their hostility against the loved ones. After all, the person who has occasioned the injury to the patient's feelings, and against whom his illness is aimed, is usually to be found among those in his near neighbourhood."

In summary, the loss of self-esteem, self-doubt and self-reproach becomes the pathologic way by which intolerable hostility finds expression in passive and concealed fashion. Seemingly directed entirely toward self, it actually also symbolically punishes the introverted cause of loss, frustration or disappointment. The great importance of ambivalence has been stressed and the primary and secondary gains of depression illustrated. Although depression varies from mild to stuporous, the regression that is present is at the oral level. The primal depression establishes in childhood a pattern for later depression in the adult when the ego has been weakened by frustration and defeat of ego ideals and goals. This helps us understand why serious depression is more prevalent in later years. Life can have a wearing-down effect as disappointments occur and disillusionment and cynicism develop. Loss or diminution of physical effectiveness may accentuate this process and increase vulnerability.

THE CLINICAL PICTURE

In the mild depression the tendency toward withdrawal into self (introversion as opposed to extroversion), relative apathy and diminished interest in life make it difficult to detect depression, since, due to these same changes in attitude, the depressed patient is less likely to complain. Often, when he does present complaints, these are translated into the various physical symptoms of fatigue, insomnia, vague bodily aches and pains, loss of ambition, etc. One can often see outward evidences of anxiety, but even in fairly severe depressions the physician may see little or nothing outwardly. As the depression deepens and as the clinician gains experience, the picture becomes much clearer.

Symptoms show all degrees of progression. Typical symptoms seen in severe depression in addition to the above include restriction or retardation of thought and speech, self-doubt, self-depreciation and recriminations, decreased sexual interests and activity, sadness, and loss of sense of humor. The following case illustrates in summarized fashion some of the comments elicited from a moderately depressed patient recently seen in consultation. The words are those of the patient, a 42-year-old single woman, who suffered depressive symptoms following the death of her mother with whom she had lived.

Case 7. "I don't have very much interest in my work. . . . I'm tired, don't seem to have as much energy as usual. . . . I just don't feel very well, my appetite isn't very good and sometimes I'm restless. . . . I guess it really isn't anything and I shouldn't trouble all you busy people with such minor things; there really isn't anything the matter with me. Look at all the really sick people who need your help." (This is self-depreciation, in which she says, in effect, "I'm really not very worthwhile; not worth bothering with"). . . . "I used to always read the paper and listen to news broadcasts; now I don't care too much and miss doing it about as much as not. . . .

"One of the other women at the office was given an assignment I might have liked, but I seem a little listless and I didn't really care too much. This is different for me. Once I might have tried a little more. . . . My last 2 periods have been late and I feel cold. My sleeping isn't very good; I wake up early and worry about a lot of things. . . . I don't feel I've accomplished very much in life (and) sometimes don't think I'm a very worthwhile person. . . . If I could just get back some interest and ambition. . . ." This patient's manner was subdued, docile, compliant, and somewhat apathetic and apologetic.

The clinician should remember that these comments were not made spontaneously or easily. Actually it required some effort to get this information, which represents roughly nearly half of the really significant things said during an hour long interview. Further, these superficial descriptive data were much easier to secure than more important data concerning her relationship with her mother, toward whom she could only consciously recognize or express the positive side of her terrifically ambivalent feelings.

NEUROTIC DEPRESSION VERSUS PSYCHOTIC DEPRESSION

In general, depression is a symptom which may progress from the neurotic into the psychotic, it being difficult to establish a sure, specific dividing line. A seriously depressed patient may maintain contact with reality fairly well, except perhaps in the sphere of judgment regarding his own worthiness. As a result, he may be a suicidal risk though difficult to hospitalize. Because of their otherwise clear orientation, it may not be possible legally to commit such patients to hospitals for their "own protection and safety."

As modified from a previously written presentation,[19] some of the factors to consider in differentiating the neurotic from the psychotic depression are:

1. Level of depression.
2. Personal adjustment of patient to his environment and life history (marked mood swings may indicate a manic-depressive psychosis or a predisposition).
3. Personal character structure of patient with particular emphasis on neurotic features as against cyclothymia (manic-depressive disease) or other psychotic manifestations.
4. Presence or absence of the serious or "malignant" symptoms generally associated with psychosis, such as severe agitation, somatic delusions, psychotic hypochondriacal preöccupations, hallucinations, deep retardation, etc.
5. Regression more complete and drastic in the psychotic depression.
6. An assignment of the relative degree of retreat from reality and the external situation.

SPECIAL TYPES OF DEPRESSION

The Situational or Reactive Depression. Sometimes the neurotic depression is so classified because it is often seen to appear following a specific traumatic situation, apparently as a direct response. For certain cases the use of these terms has a certain convenience as long as one does not lose sight of the very important internal factors, the dynamics of depression.

I have seen instances of "reactive" depression follow such diverse "specific" traumatic situations as failures in school and business, the discovery of an unwanted pregnancy, apprehension for a criminal offense, being jilted, retirement, separation and divorce, death and birth, court martial conviction, political defeat, etc. The following case illustrates the onset of depression following involuntary retirement.

Case 8. A 58-year-old single woman, a former professional worker in Federal service, consulted her family physician for feeling "run down." He elicited symptoms also of nervousness, insomnia, and listlessness, noted her apathetic appearance, and correctly diagnosed depression. Upon psychiatric evaluation, evidence was uncovered of withdrawal of interests, low spirits, a loss of spontaneity and some slowing of thinking. The insomnia was of the type pathognomonic of depression.

The history disclosed involuntary retirement about 3 months earlier. Serious, devoted to her work, and centering her life around it for years, she had no resources to fall back upon when retired. She had gradually become depressed, nervous, restless, and lost interest in things. There were some suicidal ruminations. This patient made a satisfactory recovery during some months of a moderately intensive psychotherapeutic régime.

In a sense all depressions are reactive, since they always follow a loss, be it actual or symbolic. We shall see shortly how this applies even in the seemingly inconsistent type of depression precipitated by success, the achievement of a sought-after goal.

The Anxious Depression. In this type of depression there is a large concurrent amount of anxiety. This anxiety, often expressed externally as restlessness and agitation, may tend to disguise some of the depressive features, such as retardation. The anxious depression is serious and may be a precursor of the fulminating agitated psychotic depression, into which it merges. Many times these patients are very resistant to therapy. In the following example a physician who suffers from a very severe depression cannot accept psychotherapeutic help.

Case 9. A 46-year-old pediatrician from a southern city arranged for psychiatric consultation in order to discuss "domestic problems." There were ample indications, corroborated from independent sources, of outstanding success in his medical career over the past 18 years. His professional work, however, had declined steadily in quality and quantity for some months. His attitudes toward himself of depreciation and doubt were not in keeping with the actuality of his wide reputation for medical competence and his position of respect and excellent professional reputation in medical circles.

A rather rigid, highly conscientious, mildly obsessive physician, he deservedly enjoyed the respect and confidence of both colleagues and patients. The deterioration of the marital situation was gradual and had terminated in divorce 8 months before the consultation. The divorce appeared to be the precipitating event in a severe anxious depression. Concurrently with a declining interest in medical practice, he devoted a large percentage of his time and effort in trying to persuade his wife to return to him. He assumed (unrealistically) total responsibility for the marital difficulties. As he talked of his need for his wife, he paced the floor, was quite agitated and wept copiously. He stated: "If I were a real man, I could end all this difficulty. . . . I have been a failure. . . . I guess I can't be depended upon." (Actually, this was a concealed reproach of his wife—see dynamics.)

His restlessness progressed to the point where he was unable adequately to practice his profession. His time was largely spent in driving his car around the city more or less aimlessly. He described how he had already consulted well known psychiatrists in 3 different cities but could not accept their suggestions for treatment.

This patient was suffering from an anxious depression in which the severe state of restlessness augured ill for an early recovery. It is sometimes possible in this type of case roughly to gauge the gravity of the illness by the amount of agitation present. At the time of consultation this man was unable to undertake treatment on a voluntary basis. Yet he was not sick enough for hospitalization involuntarily by commitment, a fact which occurs not infrequently because of our commitment laws, which state, in effect, that only overtly psychotic patients can be sent to a hospital for treatment against their will.

In the anxious depression there is a self-accusatory, reproachful and self-depreciatory theme which is more or less unrealistic. (Note earlier dynamic formulations.) The anxious depression (as noted above) is characterized by restlessness or mild to moderate agitation which may cover over some of the apathy and withdrawal of depression. Anxious depressions may be so classified with the group of illnesses herein described when they are clearly neurotic.

The Depression of Success. A curious phenomenon is the seemingly paradoxical depression that sometimes follows the achievement of a long-sought-after or sometimes unexpected goal. The depression is apt to be more severe, even of psychotic depth, when the success is outstanding. Although the dynamics are not simple, they are very interesting and it is quite possible to understand how depression can follow success, entirely in keeping with our previous discussion of the dynamics of depression.

We have seen that depression develops as a desperate effort to conceal the hostile side of the intense ambivalence (the rejected drives: to vanquish, annihilate, outdo, destroy; ultimately, to orally incorporate) toward the loved object which one dares not harm because of the simultaneous intense dependence. The success symbolically recapitulates the primal ambivalent struggle of the oral phase. In effect, one has "out-promoted oneself" and achieved the destruction (oral incorporation) of the loved object. Now the terrible thing secretly desired, but also terribly feared, rejected and denied, has happened. How can one ever again be dependent since the object of dependency has been symbolically swallowed up? The loss of the symbolic object of depending, on this deeper unconscious level, equates the loss of the more usual external and tangible object which we have seen illustrated earlier in other depressions. It is a horrible loss for which the patient is inconsolable.

A reasonably common example of the depression of success is the "promotion depression" seen in military service and business. If one of these patients could talk "straight from his unconscious" he might say something like: "One of my secret hidden drives is sadistic: to hurt, to destroy, to acquire, to take over, to swallow up. I couldn't face even the thought of these. They were too dangerous in childhood since they threatened, if successful, to deprive me of what I also vitally needed—mother. There was also the dreaded danger of retaliation. Accordingly, I have developed opposite traits (character defenses) to conceal recognition even from myself, so that I am outwardly acquiescent, compliant, pliable, and conciliatory. My promotion swept me with success feelings which made me more nearly (and dangerously) aware of how much I really wanted my destructive hostile feelings to succeed—my sadism. Further, as a result of gaining this success, I am impelled into a more active position and responsibility. My dependent position was part of my defense against a more active position (hostility). Threatened with recognition of my hidden sadism, I can no longer reinforce my hiding of this by seeking refuge and withdrawal—keeping out of the spotlight, out of a more active, less dependent position. My object loss is not an outward disappointment or frustration then, but a symbolic one—the loss of my dependent position." (This is the symbolic loss of the original object of the positive dependent side of the ambivalence, usually mother.)

In 1915, in discussing "those wrecked by success," Freud[21] presented an interesting example of deep depression of a medical school teacher upon selection to fill the place of his retiring professor. In commenting on this same case many years later Reik[21] said "the physician behaved as if his (hidden sadistic and) ambitious wishes had brought about the death of his predecessor. . . ." There is, of course, more interpretation possible when we follow the dynamics as summarized in the foregoing paragraphs. The terrible guilt and loss follow fantasied replacement (outdoing, vanquishing, destruction) of the professor, an older man who stands in the same authority and being-depended-upon position as did an important parental figure (here, likely, father primarily). The success symbolically achieves (and recapitulates, but now disastrously successfully!) the aim of the negative sadistic ambivalence of (the oral phase of) childhood.

SUICIDE

Suicide is the extreme self-destructive end-result of complex unconscious drives. It is the ultimate expression of the self-punitive and sadistically destructive aspects of depression. Thus suicide, as we saw also in depression, inevitably has in it the symbolic expression of hostile aggressive forces. In suicide these are murderous in extent and are in quite literal fashion "acted out." Freud noted that "we have long known that no neurotic harbours thoughts of suicide which are not murderous impulses against others, re-directed upon himself. . . ."[18] Karl Menninger[22] in his excellent study "Man Against Himself" proves most convincingly by a wealth of data from many sources the existence of three major hidden dynamic components in suicide: (1) murder, (2) the wish to be murdered, and (3) the desire to die. Menninger's book is not only fascinating but easy to read and is strongly recommended to the interested physician as the classic in its area.

Suicide is by no means a minor area of medical concern. Completely disregarding the many unverified cases, the far greater number of cases of "partial" psychologic or physiologic suicide, psychologically determined "accidents" and suicidal equivalents, etc., the 17,145 verified cases alone of "total" suicide in the United States in 1950 cannot be lightly shrugged away. This is a rate of 11.4 cases per 100,000 population per year. Further, one must recall that very many of the persons who commit suicide are substantial contributors to society and, given adequate medical care, could, in many instances, be restored to emotional health and social effectiveness. As one of the leading causes of death in 1950, suicide ranked number 12.* This breaks down further for the white population into cause number 9 for the males and cause number 12 for the females. For non-whites the figure as to order in the leading causes drops to 19 for males and 29 for females. Following these figures through the years reveals little change. A slight decrease in war years and a corresponding increase in the depression did take place, which fact has a certain significance.

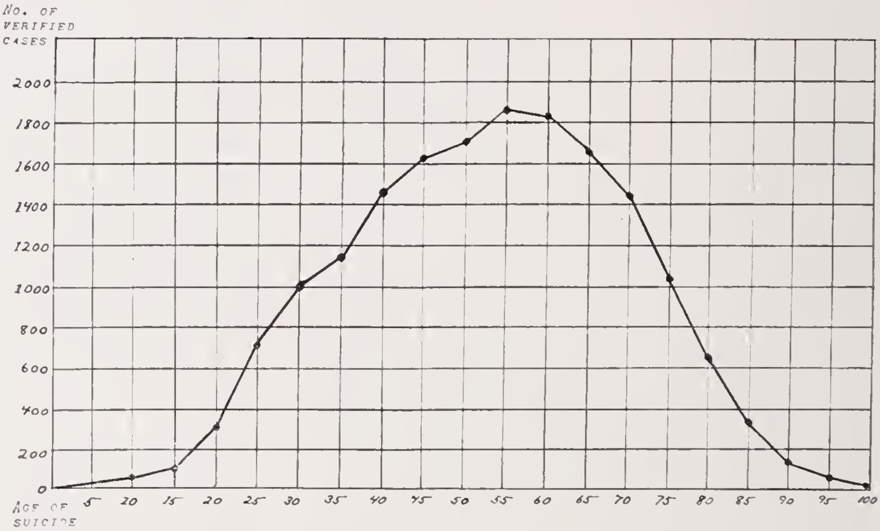

FIG. 2. Incidence of suicide by age groups in the United States. (17,145 cases reported in 1950[24])

Suicide, however, ranked number five in leading causes of death in all white males between 15 and 44 years of age (statistics from 1947[23]).

Figure 2 indicates the incidence of suicide according to age groups. Note the peak which takes place during the middle years.

In accord with dynamic formulations, suicide may be the ultimate expression of inverted sadism, as well as the masochistic destruction of the hated and disowned aspects of the self. Thus suicide has in it elements of both punishment and expiation. The negative self-appraisal may actually be a realistic one or far from it. A paper dealing with some interesting aspects of research concerning the negative self-appraisal and the projection of this to others outside oneself, experienced consciously as "King David's anger,"[25] is soon to be published. There is usually present the turning inward of hostility with the destruction (murder) of the internalized enemy (usually a parental figure or parental surrogate). Often the act has in it elements of reproach. This may be an effort to make someone feel guilty or responsible, and may be regarded as the "secondary gain" of suicide.

Although suicide is associated closely with depression, the outward evidence of, or degree of the depression is by no means necessarily indicative of the degree of probability or possibility of occurrence. In the following case of suicide by drowning there were no reported evidences of apparent depression.

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* I am especially grateful to the National Office of Vital Statistics who provided these data which had just been completed for 1950 at the time this paper was completed, and had not yet been published in their own forthcoming official publication.[24]

Case 10.[2] A 46-year-old woman had established a reputation for gentleness and compliance over many years. A successful mother with an apparently successful marriage, she developed an unrecognized depression and determined to take her life. Tying 2 old-fashioned flat irons together with a short length of clothesline, she lowered herself backwards into the filled bathtub. The irons were placed on either side of her head connected by the line across her neck.

This case also illustrates an interesting psychologic reinforcement of her determination by the setting up of a symbolic "authority" in the irons, to which she then submits.

It is true that the suicidal threat or gesture may have its histrionic elements and dramatic intent in the hysterical patient. We saw this illustrated in case 2 of the preceding paper.[3] The suicidal threat or gesture is not uncommon. Nevertheless, one should always be wary when the patient talks of suicide. It may be a real danger sign, but, if not, is always in itself the sign of emotional disorder and should be seriously regarded accordingly.

When suicide has been prevented by whatever means, a life can be considered saved; for, under proper management, the cause behind the attempt can be worked out and removed, and with it the desire to part from this world. Under such favorable circumstances, the patient, especially the highly conscientious victim of depression, can be returned to his useful life.

The following case illustrates an instance of a determined suicidal attempt, prevented only by fortuitous circumstances, in which there was an excellent recovery.

Case 11. The patient was a highly respected supervisory nurse with an excellent professional record, who carefully planned to take her life while in the midde of a severe depression. She secured between 80 and 100 grains of seconal which she took, having secreted herself where discovery was ordinarily impossible for some days. Through completely fortuitous circumstances she was discovered in deep coma after nearly 8 hours. Rigorous emergency treatment saved her life, and it was gradually possible to institute intensive psychotherapy. Her progress was slow but excellent. Within 4 months she was again in a responsible position. She completed her treatment, and during nearly 4 years has remained free of major depressive symptoms and has produced effectively and efficiently.

TREATMENT

The treatment of choice in depression is intensive psychotherapy in expert hands. When this is available and feasible, there is no substitute for the resulting insight into the causes and background of the illness. When successful it will contribute to a healthier emotional adaptation to life, secure resolution of the current depression, and render the person less vulnerable to future episodes. Since our remarks must be limited to a few points of particular applicability in the psychotherapy of depression, the interested reader is again referred to previous comments about treatment in earlier articles of this series. These are to be regarded as introductory to the current discussion.

In the early treatment of depression, measures designed to provide ego support may be very useful. As we recall, the ego has suffered as the battle over repression and control of aggressive drives waged back and forth, and through punishment by the harsh overcritical conscience. As the ego recoups a little the therapist may do well to help develop and encourage attachment to new libidinal objects (the selection of new goals, the replacement of substitute objects for love and affection). The physician may himself become one object for attachment, an event which must be recognized and dealt with in due course and in a matter-of-fact way.

The therapist must be cautious about premature interpretations concerning hostility and dynamics. Otherwise they will be rejected, possibly vehemently, with impairment of rapport or, even should they be accepted, the onset of a violent emotional storm.

The goals of treatment of insight-directed therapy might be summarized as:

1. Readjustment of the level of aspirations in keeping with real abilities. New or alternate goals (ego-ideals) may replace those impractical of achievement or beyond reach.

2. Lessening the harsh conscience (super-ego) which lessens self-punitive masochistic aspects.

3. The recognition and study of the hostility

and aggression. Increased ability to deal with ambivalence in a more constructive fashion.

Further, as insight grows and maturity develops, the dependent needs resulting in the factors of secondary gain will lessen. These important goals as outlined are not attained easily. Many years of use deepen familiar pathways. Intensive treatment lasting 2 to 4 or more years is to be expected. It is a long-term, difficult and expensive, but rewarding endeavor. Actually, recognition and analysis of the ambivalence is a major project in much of modern psychoanalysis. There is usually more resistance in working out these areas by patients today than was true 3 to 5 decades ago. The rigid taboos of the Victorian era have modified. As a result a more open discussion in regard to sexual matters is possible. Today patients more often have their greatest difficulties in discussing their feelings of love, tenderness and warmth, or their feelings of hatred, anger and resentment. Because of this, association in present-day therapy may require more direction. Free association in the Victorian era was often particularly helpful in eliciting inadvertent references to concealed (unconscious) sexual roots of the neurosis. Sexual repression is less stringent in our culture today.

Dr. Fromm-Reichmann[26] in Chapter VII of her recent book interestingly discusses the value of associations in treatment in which she calls attention to the increasing focus of psychotherapy "upon the investigation of the ego-defenses, the security operations of patients as they are mobilized by the psychotherapeutic process. . . ." Thus, the therapist might more profitably be concerned less with the recall of early "forgotten memories" or the actual content of painful or censored associations and more with the emotional reactions actually elicited by this material coming under scrutiny in treatment, or the emotional resistances to having it come under scrutiny.

Electric shock therapy has its most acceptable indications in the treatment of depression. Many psychiatrists are enthusiastic about the use of shock generally, and many oppose its use equally vigorously. In cases of psychotic depression in which psychotherapy is not available or feasible, shock may be life-saving. Many psychiatrists have had experience with this. On the other hand, the indiscriminate use of shock is to be deplored. It is my impression (based upon considerable earlier personal experience with giving and supervising the administration of shock prior to personally abandoning its administration) that shock treatment may later be followed by episodes of depression which are possibly even more resistive to psychotherapy.

The results of recent memory loss following electric shock in possibly "removing the sting" of recent precipitating situational traumatic events have already been discussed in the section on Amnesia in "The Dissociative Reactions" (October ANNALS, p. 543). This may be particularly important in cases following recent precipitating severe loss, frustration, or disappointment. Unquestionably, electric shock has also symbolic significance which varies widely with different patients but, in addition to the foregoing, may help explain the greater effects upon patients with depression than upon other cases. Shock may admirably serve punitive internal forces symbolically by:

1. Serving as the punitive agent of the harsh super-ego, aiding and abetting guilt-ridden or masochistic needs for self-castigation and punishment and/or

2. Aiding the inverted hostile and aggressive sides of the ambivalence, which are being expressed in concealed symbolic fashion against the introjected object.

Where shock helps to symbolically "satisfy" these internal punitive needs, recovery from the depression may take place or be facilitated.

SUMMARY

In summary, we can note the relative efficacy of therapeutic efforts in cases of depression. The investment of necessary time, effort, and money is well worthwhile with the coöperative patient, and the prognosis in expert hands is good, ranking in high order among the psychoneuroses.

This paper has presented certain important clinical and dynamic features of depression. We have seen how widespread is depression. We have seen the challenge in making an early diagnosis, and the adequate results and satisfaction from treatment in restoring to emotional health an often highly socially useful person.

Depression and grief were compared to anxiety and fear. Those character defenses most characteristic of depression have been listed and the need for and the dynamics of their development discussed. Grief states and their gradual merging into pathologic depression were followed by a resumé of psychoneurotic depression. Current figures from several sources were cited to illustrate the wide prevalence of depression, after which were considered factors in the dynamics and pathogenesis of depression. Adult depression was traced from its basic roots in the ambivalent conflict of the oral phase of personality development with the resulting childhood prototype of later depressions. The relation of depression to inverted hostility was stressed and a viewpoint of primary and secondary gains in this type of illness was offered.

Following a discussion of the clinical picture, differences were noted between neurotic depression and psychotic depression in terms of level, character structure, presence of malignant symptoms, and the amount of regression. Reactive or situational depression is a useful term implying the onset of depression after a precipitating situational event. Anxious depression is the illness characterized by large amounts of both of these elements. The success depression is the seemingly paradoxical depression following achievement of a goal that symbolically achieves the hidden aim of the oral aggressive drives.

Suicide is, among other things, both the actual extreme end-result of masochistic self-punitive drives and the symbolic destruction (murder) of the internalized and secretly hated object. Secondary gain motives exist in the attempts to secure reactions from other people toward whom the suicide is often intended as a reproach and in whom the act is intended to arouse feelings of guilt and responsibility (the ultimate in nonconstructive dependency appeal). As a leading cause of death suicide ranks in verified "total" cases number 12 in all population groups, number 9 among white males. Other figures have been cited.

Acknowledgment for valuable suggestions is made to Dr. Douglas Noble, who reviewed parts of this paper with me, to Dr. Daniel S. Jaffe for ideas about presenting the success depressions, and to Dr. Seymour J. Rosenberg for review of the manuscript.

6206 Hillcrest Place
Chevy Chase 15, Md.

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President's Page

LICENSING OF HOSPITALS

THE BASIC LEGISLATION UNDER WHICH HOSPITALS ARE LICENSED IS AN ACT APPROVED APRIL 20, 1908 (D. C. CODE STAT. 32-301) WHICH INCLUDES IN THE ENACTING PARAGRAPH THE WORDS "ANY PRIVATE HOSPITAL OR ASYLUM FOR THE RECEPTION OF HUMAN BEINGS OR OF DOMESTIC ANIMALS." THE REMAINDER OF THE ACT APPEARS OUTMODED AND ARCHAIC.

RECENT PROPOSALS FOR REGULATION OF HOSPITALS UNDER THE AUTHORITY OF THIS ACT FOCUS ATTENTION UPON THE NEED FOR MODERN LEGISLATION FOR THE LICENSING OF HOSPITALS AND NURSING HOMES IN THE DISTRICT OF COLUMBIA.

THE MEDICAL SOCIETY HAS NOW UNDER CONSIDERATION THE IDEA OF ADVOCATING A NEW ACT FASHIONED AFTER THE "MODEL HOSPITAL LICENSING ACT" PROPOSED SEVERAL YEARS AGO BY A JOINT COMMISSION REPRESENTING INTERESTED NATIONAL BODIES INCLUDING, AMONG OTHERS, THE AMERICAN MEDICAL ASSOCIATION, THE AMERICAN HOSPITAL ASSOCIATION, THE NATIONAL NURSING COUNCIL AND THE UNITED STATES PUBLIC HEALTH SERVICE.

Herbert P. Ramsey

Editorials

THE RETARDED CHILD AND HIS FAMILY

Part of the requirements for the completion of courses in pediatrics at Georgetown University is the construction and presentation of a thesis. The subject matter of these papers is sometimes assigned, and that of others, when a student's interest leads him along certain lines in the general field of pediatrics, is selected by the student, with approval of the head of the Department. Last year at a ward rounds session the subject of the retarded child arose. The question was posed by Dr. Michael J. Aria, then a senior clerk, "Doctor, when you discover a baby is retarded mentally, what do you tell the family? How do you advise them to proceed?" The instructor talked about the skill in the art of the practice required to properly lead the family into understanding and accepting this most disastrous of diagnoses. He discussed the differential diagnosis of the condition and touched on the meager knowledge available concerning the causative factors, and the symptoms, signs, and specific phases of the condition. "But, Doctor," continued Dr. Aria, "if tomorrow, for example, you have a family with an infant with Mongolian imbecility, where can they go for advice and help in the follow-up care of this baby? What happens to the family when the baby goes home from the hospital? What facilities are there in Washington for the professional care or hospitalization of the abnormal child, and what agencies might the family contact to assist them with this problem?" The instructor thought that over and after the fashion of Socrates, replied, "Dr. Aria, I don't know; suppose you accept that question as the subject matter of your pediatric thesis and write a paper on the results of your inquiries."

There are numerous community resources dedicating considerable time, effort, and a good deal of money to the solution of various parts of this problem, but in general the liaison between these organizations and physicians is poor. Many doctors in practice who are "on the firing line" with this problem of the retarded child have little or no idea where they can turn for help and advice to give the family of the unfortunate child. Indeed, with consideration of the size of this long-neglected problem, the available facilities, particularly for residential care and research, are woefully too few. Dr. Grover Powers has recently estimated that there are between one and two million such children in this country, and, therefore, between one and two million families are affected. In volume alone this condition is exceeded probably only by mental illness.

Dr. Aria wrote letters to numerous agencies and organizations, and by telephone interviewed as many of their representatives as he could. In reply to his question concerning the Social Service agencies available to assist a pediatric practitioner, he was shunted from one person to another, accumulating a large file of letters of reply, all of which suggested other possible sources of information, many of whom had already been contacted, and none of whom had an answer. Those replying included several national organizations specifically constituted to advise on matters of children's health, including the Children's Bureau.

A lengthy thesis was turned in at the end of the school year, and appended was the file of

Opinions expressed in contributions to the Editorial Section are those of the writers and do not necessarily reflect the views of The Medical Society of the District of Columbia.

letters he had received. He could not find the answer to his inquiries.

Facilities to assist crippled children are many and include the selfless and wonderful private organizations besides the local and Federal governmental agencies charged with these matters. However, areas of responsibility to assist the general practitioner and pediatrician in finding this assistance, particularly in regard to the mentally retarded children and their family, are difficult to find. Each interested organization has certain areas in which it operates but none seems to provide the help sought by Dr. Aria.

There is a distinct need in the community for an organization to act in liaison between these agencies and the practicing physician, who is the person that parents go to for advice. Fundamentally, of course, there are very few facilities available to assist the mentally retarded child and his family. Progress in crippled children has been made along the lines of cerebral palsy, heart disease, poliomyelitis, muscular dystrophy, nephrosis, and many other conditions, but concerted efforts to assist the mentally retarded child have been miserably few, despite the immensity of the problem.

It has been suggested that possibly the Federally-supported Children's Bureau, by virtue of its branch offices which are well distributed geographically, is the proper organization to assume responsibility in this regard, and perhaps it could be charged with the development of a solution to this urgent problem. At the present time such liaison and plans are not available.

F. G. B.

NONSERVICE-CONNECTED DISABILITIES AND THE VA

Although the first battle against socialized medicine was won, other battles are yet to be fought.

Under a new guise, the socializers have now covered themselves with the Veterans' cloak to hide their purposes. Clothed in an honorable robe and receptive of the gratitude of a thankful people, they hope to delude the men who served in the Armed Forces into a completely "free" governmental medical care program as their just deserts.

This new development has seen the AMA, The National Medical Veterans Society, and all organized medicine take up the crusade to halt the destruction of unencumbered medical care and to prevent the establishment of a double standard among our citizens.

At the close of World War II, the Veterans Administration had 81,000 beds. Today 120,000 beds are available and a construction goal of 131,000 is envisioned. This has been the result largely of small selfish pressure groups, the most vociferous of which have been the service organizations. These organizations, which are composed of many high-minded men, are nevertheless controlled by a handful of service officers who in many instances are employed by the Veterans Administration and act as the only tax-supported lobby in the country.

If Congress should continue to listen to this group, hospital beds will continue to be constructed and the 20,000,000 veterans in civil life today will be encouraged to seek their medical care from VA establishments. With each year 1,000,000 new veterans return to their homes, and the age of these men gradually approaches the period of increasing illness.

The cost of $600,000,000 yearly can only mushroom with the result that the taxpayer must pay not only for his own medical care but for his veteran neighbor next door, who in most instances is well able to afford it.

Actually the veteran is not entitled to free hospitalization in the VA program unless he has a service-connected disability, but by law, where existing facilities are available, certain priority is given for hospitalization for nonservice-connected disabilities. In allowing this type of admission, the veteran must sign a statement, which is commonly referred to as the P 10 form. In this statement he must state whether or not he is financially able to pay for hospital expenses. It is this particular statement that has been glossed over in the past. The veteran has been frequently told that he need not be concerned with this statement, that it is his just right to have free hospitalization and medical care.

A recent directive from the VA requests actual figures on the veteran's income and total assets. These figures may be used in the future as information for prosecution for fraudulent statements of the veteran having signed this form. The veteran himself is not usually to blame. Many go to veterans' hospitals under some duress. They are pushed by service officers of service organizations to accept VA hospital care when many of them if left alone would prefer to stay at home.

The doctor who sees a veteran as a patient should educate himself about these requirements in order that he might advise his patient wisely on this problem. He should instruct the veteran patient about the liability to prosecution for falsifying his financial statement about ability to pay. He should emphasize the moral obligation to himself and his family for the future of medicine in general and the country as a whole. If this is not done, medical care in VA hospitals will continue to expand and community hospitals will deteriorate.

All communities have felt the depletion of their trained personnel. Doctors, nurses, technicians, have flocked to the VA hospitals for better salaries, leaving the community hospitals understaffed and gasping for help. Those remaining have clamored for equal pay and as a result the private patient has suffered from ever-rising hospital costs.

The highly competitive VA training programs with high pay scales have attracted residents from community hospitals, again leaving many hospitals without help.

How long can this continue? It will continue until either the community hospitals collapse or the parasite is removed. The great majority of veterans realize this and dislike the double standard of medical care. They would prefer their families to receive the same efficient medical care but they prefer it all to be in their local community hospitals where the waste is minimized and where they are near their friends and relatives.

It remains for the doctors to see to it that these facts are explained to their veteran patients. Most veterans who ask for VA medical care do not understand the problem. Most have been told by a "friend" that they had a "right" to it. Doctors know—and should be able to explain these facts. Do you?

Oscar B. Hunter, Jr., M.D.
Chairman, Veteran Affairs Committee,
National Medical Veterans Society

EFFECTIVE AID FOR CRIPPLED CHILDREN

A decade ago members of the Board of Directors of the District of Columbia Society for Crippled Children, recognizing the lack of facilities for the care of the cerebral palsied child, instituted a program for the nursery school and kindergarten training of those children. They also added to their program clinics for the study of the children. The first clinic was held by Dr. Winthrop M. Phelps, of Baltimore, on February 18, 1943, and clinics have been conducted monthly ever since.

Realizing that physical, speech, and occupational therapy were also necessary, departments were established in each of these categories. Later, diagnostic clinics for speech evaluation, pediatric study, ophthalmologic, otologic, and dental examinations were added, as all of these were deemed necessary in order to determine the capabilities of the whole child.

The increasing demand for services at the Society necessitated the appointment of an additional consultant in cerebral palsy in the person of Dr. Burton Chance, Jr., of Philadelphia. In order to conveniently and expeditiously treat those cases of brain damage suffering from seizures, an anticonvulsive clinic was also established.

During the past year, 540 cases have come under clinic observation, and 218 of these were new cases. Three hundred eighty-seven of the 540 cases were referred by physicians in the Washington Metropolitan Area. The remainder were referred from clinics conducted in the District of Columbia, Maryland, Virginia, and by the Armed Services. The incidence of cerebral palsy has been estimated to be approximately 150 each year in the Metropolitan Area, and the fact that 218 new cases have been observed would indicate that the incidence is, in all probability, being taken care of by the Society.

The number of visits to the various clinics has more than doubled that of any previous year, the total number of visits being 1,582; of these, 810 were to the Cerebral Palsy Clinic. Seventy-five per cent, or 403, of the cases observed had cerebral palsy and all but 1 of the remainder had some form of central nervous system damage which required the special services provided by the Society.

The professional personnel of the Society consists of a Coördinator and Psychologist, an Assistant Coördinator and Principal of the School, 3 additional teachers, 2 physical therapists, 2 speech therapists, an occupational therapist, and 2 medical secretaries, all under the supervision of a Medical Director who is aided by the Scientific Council; all of the physicians are members of the Medical Society of the District of Columbia.

During the year, 105 children were enrolled in the School; 75 received occupational therapy; 114, speech therapy; 137, physical therapy; and 195 received a complete battery of psychological examinations. Braces were furnished to 88 children and in no instance was a child deprived of the braces because of the strained financial situation of the parents.

It is felt that the Society is rendering a great service to these unfortunate children, and its activities warrant the whole-hearted support of the community.

William P. Argy, M.D.
Medical Director, D. C. Society for Crippled Children

AN ENDOWED HOME FOR ELDERLY MEN

The care of the elderly and aged has become a prominent problem in most communities. Many homes and institutions which care for these people are both inadequate and overcrowded. For this reason, the John Dickson Home for elderly men should be known to each citizen of the District of Columbia, and especially to each physician, as the latter is so frequently called upon to advise regarding elderly men.

The John Dickson Home is housed in a handsomely furnished English colonial building at 5000 Fourteenth Street, N.W., Washington, D. C. Because this is a true home, the building displays no sign to identify itself to the casual person who may pass by. Probably most physicians have passed and observed the building without realizing the purpose which it serves.

The John Dickson Home was made possible by the philanthropy of Henry Dickson, a successful Washington businessman, as a memorial to his father, John Dickson of County Down, Ireland. It was opened in January, 1913. The Home is incorporated under the laws of the District of Columbia in accordance with the terms of the Testator's Will as a nonsectarian charitable Trust and is managed by its Board of

Trustees. Its endowment is sufficient that those who participate in the benefits pay no dues or other charges.

Requirements for admission provide that each applicant shall be a man at least 65 years old who is in good health and who must have been a resident of the District of Columbia for at least five years preceding the date of application. The applicant must have been a good citizen who in earlier years had met his responsibilities but is now unable to do so. Each member, after having been accepted, is furnished with food, clothing, medical care, entertainment, etc. Each occupies a separate bedroom and enjoys all the privileges of a resident guest in a pleasant home atmosphere.

The Board of Trustees invites each physician to bring this to the attention of applicants who might meet the requirements and would appreciate the opportunity.

Francis G. Addison, Jr.
Floyd E. Davis
Charles H. Doing
Calvin T. Klopp, M.D.
Alfred H. Lawson
Leonard Marbury
Douglas R. Phillips
Board of Trustees, John Dickson Home

In and Out of Focus

BY THE OBSERVER

"It Might Be the Spark . . ."

On only rare occasions are spiritual matters discussed in medical meetings. This is not surprising, for the primary purpose of such meetings is to further scientific knowledge or to consider problems directly related to medical practice. Then, too, this subject is usually regarded as too delicate and personal for discussion in a group which varies so greatly in its religious beliefs. The more venturesome in the medical profession, however, are not deterred by such arguments. Most physicians, they say, have one thing in common: They profess a belief in a Supreme Being. This being so, why should there be any hesitation when circumstances warrant to discuss the power of religious faith and its regenerating influence on human beings?

Dr. Julian P. Price, until recently Editor of the *Journal of the South Carolina Medical Association*, is in this category. He made this eloquently clear in his 'swan song' before the State Medical Journal Conference held in Chicago on November 9 and 10. Like most thinking people, Dr. Price is troubled over the state of the world, which he describes as suffering from "spiritual disease." Symptoms of the 'disease,' he said, are distressingly apparent: a shocking epidemic of crime; all-too-common dishonesty in public office; widespread disregard for the sacredness of marital vows; and hysterical search for pleasure. These are just a few of the signs which, Dr. Price observed, are cause for deep concern.

Dr. Price took cognizance of the fact that his listeners might wonder why he should discuss spiritual matters at their meeting, and he posed a question for them. "Is it not," he said, "the prime concern of the church and the clergy and should we not leave such matters to them?" The answer to this question, he said, is obvious. "Before we were physicians we were citizens and as such we should be deeply concerned with the health of our Nation. The church and the clergy should be in the vanguard but the task is not for them alone—their hands must be upheld and their efforts strengthened if we are to save our Nation from spiritual lethargy and eventual spiritual death. And if one desires to know what happens to a nation when it becomes spiritually dead he need but read the history of the Roman Empire.

> "Most physicians we have known are men of high principles and are recognized as such in their communities. Many of these physicians hold strong religious beliefs and yet, for some reason, they tend to shy away from expressing their convictions except in private conversation with intimate friends. As a result the public is prone to regard physicians, as a group, as men with good moral character but men who are luke-warm toward religion itself.
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> "What would happen if the thousands of physicians in this country who are members of religious organizations would suddenly decide to wage an all-out fight against spiritual disease as they are now fighting against physical disease? What would happen if the same group of men were to let the people know the principles for which they stand and the beliefs which they hold? We do not know, but we are sure that the effect would be far beyond our imagination. It might well be the spark which would halt this Nation in its present course and turn it toward the spiritual rebirth which is so sorely needed. It is a challenge with which we are faced, an opportunity which may never be ours again."
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> "The only remedy which is of any avail—and to this history bears eloquent testimony—," Dr. Price said, "lies in a change of heart. And we are but adding our voice to a host of others when we say that the greatest need of our country today is a spiritual rebirth, a return to God and to his eternal principles. And the change must come in the heart of the average citizen—the butcher and the baker, the farmer and the business man, the lawyer and the laborer, the mechanic and the physician—for it is he who ultimately determines the course of the Nation."

Those who feel as Dr. Price does about it—and your Observer is one—are firmly of the opinion that our future welfare and perhaps our very existence as a Nation will depend upon what we do about the low moral state of our society. Physicians have an unusual opportunity to share in the effort to bring about "a change of heart."

Your Observer can think of no more appropriate Christmas message to members of the District Medical Society than that delivered to his fellow editors by Dr. Price.

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On Being President

"I wouldn't accept the presidency of the Medical Society if it was offered to me on a silver platter" . . . "Too much politics to suit me". . . "Anyway, I am too busy with my practice to devote much time to a thankless job."

That about sums up what your Observer has heard many times during his years in Washington. There are, of course, a few who know something about the compensations and headaches of a president. But the majority, it appears, have no desire to head their organization, although one suspects that if they were better informed it would not take too much prodding to change their minds.

It is to the majority then that these comments are directed, in the hope that they will not only be enlightening but generate in some degree an appreciation of the contributions made by the Society's Presidents.

Your Observer has had the privilege of serving with 16 Presidents of the District Medical Society and he cannot recall a single one for whom he did not have higher regard at the end of his term than he had at the beginning. This, despite the fact that they have varied greatly in characteristics and temperament. The fact is, that all of these men grew in stature as medical leaders under the pressure of responsibilities.

The connotation which many physicians place on the word 'politics' suggests slick maneuvering. If this assumption is correct, your Observer can assure his readers that in his association with the Society's Presidents there has not even been the suggestion of such a thing. There may have been 'politicking' in the period preceding the President's election, but once in office he has no longer considered himself the representative of a group which helped elect him but the head of an organization, and as such the representative of every member. This may seem a naïve observation to the more skeptical readers of this column, but your Observer can testify that it is a fact.

The President is usually a busy man professionally and therefore serves the Society at considerable sacrifice in time and money. In all instances he has given generously of both, well aware that any expression of gratitude on the part of the members is unlikely and that he will derive his greatest satisfaction from a job well done.

It is a great honor for a physician to be chosen head of his medical society and every President has been cognizant of this fact. Circumstances may or may not be such as to afford him an opportunity during his term of office to make outstanding contributions to the welfare of his profession or the public. But there are always problems to be dealt with, some very troublesome; and, of course, there are invariably the inevitable routine duties which take much of his time.

When he takes office, the President has already served one year as President-elect, during which time he was a member of the Executive Board. It is here that he is initiated into the complexities of medical organization. As the months pass, he comes to the realization that there is a big job ahead. His first major task is to make committee appointments. There are some thirty committees to which he must appoint two or three hundred members. In search of the best talent he reviews previous appointments and the membership roster. Naturally, he seeks advice of his predecessors and other members who have served the Society in various capacities.

Having devoted many hours to studying this matter, he finally makes his selection and submits his appointments to the Executive Board for confirmation. The Board generally approves without discussion. After all, it is the President's prerogative to choose his own committee members. Despite his best efforts he discovers he has overlooked someone he wished to appoint or has appointed someone to a committee for which he was not particularly well suited. Then of those selected there are always a few who for various reasons refuse committee assignments.

The Society's year begins July 1. Obviously that is a difficult time to get committee activities under way. Nevertheless, a meeting of chairmen of committees is called to discuss the plans for the ensuing year. There is much optimism and everybody is ready to go—that is, in the fall. This is a disappointment to the President but it cannot be helped.

Before he became President, a committee on arrangements had been appointed for the ANNUAL SCIENTIFIC ASSEMBLY. They are in full swing and there is no let-up during the summer because the ASSEMBLY is scheduled for early October. The President takes a hand here. After all, the ASSEMBLY is in many respects the high point in his administration. So he, the General Chairman of the Committee on Arrangements and his associates devote many afternoons and evenings to planning the meeting. Finally, there is the big event—three full days and nights of presiding or appearing at luncheons, dinners, and scientific sessions.

Hardly a day passes during his term of office that the President does not confer with someone about Society matters, attend a committee meeting, or respond to a number of telephone calls. It is the telephone calls which deplete him most of all. But that is part of his job. Members may call to protest recent publicity, urge him to condemn the action of an individual or a group, request him to make an appearance at Congressional hearings, and so on *ad infinitum*.

Then comes 'the fall' when organizational activities begin in earnest. Committees come to life; the Society's Executive Offices are a beehive of activity. The staff of the latter, especially the Secretary, now consult the President more frequently.

One could go on and on about what the President does. His duties become more varied and multiply as the year progresses. Not mentioned have been the increasing number of social functions which he attends in an official capacity. It need hardly be said that these disrupt his family life considerably.

Surprisingly, very few of the Society's Presidents have complained about the demands made upon them. In fact, the excitement incident to the discharge of their duties gets into their blood. Your Observer has known but one President who did not relinquish his duties with regret. This confirms a belief he has long held that were it not for the thrill of being the 'head man' presidential material would be scarce indeed.

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A Vast Source of Information

It is inaccurate to say that your Observer has just discovered the Armed Forces Medical Library, but in a sense it is true. He had, of course, known of its existence for several years. In fact, he had talked with members of its staff on a number of occasions. But he had not seen it and therefore had little conception of its size or the extent of its services to the medical profession.

His 'discovery' followed the recent Annual Scientific Assembly, when, upon invitation of the Director, Lt. Colonel Frank B. Rogers, he visited the Library. He found Colonel Rogers, who is both a physician and a trained medical librarian, an earnest, pleasant man, obviously devoted to the institution under his direction. As might have been anticipated in an Army physician, Colonel Rogers came to the point immediately. He stated frankly that he wished to interest greater numbers of Washington physicians in the Library in the hope that they would make full use of its facilities. There were many, he said, who were doing so at present but they were very much in the minority.

He thereupon related some of the history of the Library, which is now the largest institution of its kind in the world, housing some 650,000 bound volumes and an immense collection of medical journals written in every known language. Your Observer subsequently supplemented this portion of the conversation by reading an address by Colonel Rogers. From this source he learned that the Library was an "accident of history" and that it was established by Surgeon General Lovell during President Andrew Jackson's administration in 1836. "It was a fortunate circumstance which brought John Shaw Billings to the Library in 1865, to remain there for thirty years," Colonel Rogers said. "Billings is one of the great men of the Army Medical Service, and indeed of American medicine. It was he who had the concept of the National Medical Library; when he left the Library it had become the greatest collection of medical literature in the world, a position it still holds.

> "After the last War, when we were campaigning for a new building for the Library, the place of the Library in the Government structure was questioned. Why would it not be more suitable for the Library to be operated by the Library of Congress, or by the Public Health Service, or by some other nonmilitary branch of the Government?
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> "The Surgeon General of the Army took the position that an institution which for a hundred years had been operated by the Army Medical Service, which had been developed through the foresight and courage of Army officers, which had been supported by Army funds—no doubt on occasion at a sacrifice in other activities—and which under Army auspices had assumed leadership in its field, should not now be taken from military hands. After lengthy debate, the matter was resolved, and the Library is now a joint agency of the three military services, with representation from each on an Advisory Group, and with management control delegated to the Surgeon General of the Army. This seems to be a suitable solution of the matter."

Colonel Rogers is confident that the Library will eventually be recognized officially for what it is: a national medical library. While members of the Armed Forces are the greatest users at the present time, at least one third of the total number are civilians.

"Such a library should exist for the welfare of the Nation as a whole," Colonel Rogers said; "the Armed Forces must run the Library as a public trust, making its resources available to all men everywhere who work close, heart and hands, to the problems of disease. Should the Armed Forces ever lose that perspective, they also may expect to lose the preferred position they now enjoy in the stewardship of the Library."

Having been filled in on the Library's past and present activities, your Observer was taken on a tour of the institution. The only adequate term for what he saw is 'vast.' The main building at Seventh Street and Independence Avenue, Northwest, is crammed to the rafters with books, files, and personnel. The overflow is housed in temporary buildings down a block and across the street, and in Cleveland, where the History of the Medicine Division is now situated.

The only disturbing note on the tour was the thoroughly inadequate and antiquated buildings housing this remarkable collection of medical literature, much of it irreplaceable. It is virtually impossible under present conditions to provide adequate protection against a devastating fire. This is an inexcusable situation which Congress should have remedied long ago.

Colonel Rogers especially requested your Observer to convey to members of the Society what the Library has to offer them:

1. All the material in the Library, with the exception of rare books, reference works, and unbound journals, is available on a loan basis to medical officers of the Armed Forces on active duty and to members of the medical profession practicing within the District of Columbia.
2. A photoduplication service is available to individuals who cannot come to the Library. Microfilms are also obtainable. These services are rendered at cost and must be paid for in advance. The Library will not reproduce entire periodicals or books protected by copyright.
3. The assistance of reference librarians is available to those who come to the Library.
4. There is a register of translators and research workers with whom private arrangements can be made.
5. The Current List of Medical Literature, which is obtainable by subscription through the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D.C.
6. A collection of pictures and photographs in the Art Section upon which authors can draw for illustrations.

Members who contemplate using the Library for the first time should obtain the booklet "Armed Forces Medical Library Services" for more detailed information. The Library is open to the public from Monday through Saturday, 8 a.m. to 5 p.m.

Upon leaving Colonel Rogers, your Observer urged him to tell his story wherever and whenever the opportunity offered. For it has all the ingredients of a good adventure yarn and is just as fascinating. More important, it dramatizes most effectively the value of this treasury of medical literature to physicians throughout the country and especially to the medical profession in the District of Columbia.

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PR and the Doctor's Bill

A month or so ago an insurance executive called your Observer on the telephone. He was much enthused about a notice enclosed with a bill for medical services. It read:

> THERE ARE NO EXTRA CHARGES
> FOR THIS SERVICE
>
> If you are unable to care properly for the enclosed account at this time, we take pleasure in extending to you the privilege of arranging for budget payments in accordance with your circumstances.

Upon inquiry it was learned that this notice was sent out with bills that were at least five months old. If ignored, an effort was made to determine the reason. Usually, it was not necessary, as there was immediate and favorable response. This is not surprising in view of its implicit friendliness and desire to be helpful.

Complaints lodged with the Society's Grievance Committee indicate that there should be much more of this sort of thing, because most difficulties between patients and physicians arise out of differences over the doctor's bill. A detailed monthly analysis of the complaints received by the Committee, which will be published in the MEDICAL ANNALS beginning early next year, will emphasize this fact.

While it has long since become apparent to the Committee that in most instances misunderstandings over doctors' bills were not the result of overcharges, it has been equally evident that something was radically wrong with physician-patient financial relationships. On the basis of the communications received at the Society's Executive Offices your Observer would list the factors contributing to misunderstandings as follows:

1. Failure of the doctor to discuss the cost of his services with the patient in advance. This is the primary cause of misunderstanding and bitterness. There should be no hesitancy on the part of the doctor to talk frankly to the patient or members of his family about his charges. With very few exceptions he will find them grateful.

2. The practice of permitting the 'girl' in the office to make decisions where differences over charges arise. There are, of course, many secretaries and others in the doctors' offices capable of managing their business affairs efficiently. In such circumstances there is no reason for the physician to devote a great deal of his attention to routine business matters. But he is obligated to take the time to talk to patients who object to his fees.

3. Failure to itemize his bills. This raises doubts and misunderstanding. Patients are hesitant to inquire of a doctor with whom they are pleased how he arrived at the figures shown on a statement which only bears the explanation, "Balance due for services rendered." As a matter of fact, they should not have to request this information; it should be provided as a matter of routine.

In some instances, of course, it is customary to make an over-all charge for services rendered. But ordinarily there is no reason why the doctor should not itemize the bill.

4. Failure to exercise good judgment in enforcing collection of bills. Most patients want to do the right thing and there may be good reason why they haven't paid the doctor what they owe him. If possible the physician should talk to them in the office. Where this is not possible, he should write them personally. His communication may be brief but it should be a personal, not a form letter.

If the doctor feels justified in turning his bills over to a collection agency, he should give strict instructions as to the manner in which they should be handled. Certainly he should not give blanket authority to the agency to take legal action against his patients in an effort to collect his bills. This prerogative he should reserve to himself.

The practice of turning over very small bills to an agency for collection is, to say the least, questionable. Ordinarily the ill will caused and the financial returns are not worth it.

These are some aspects of the handling of patients' accounts which contribute to the unhealthy relationship between doctors and their patients. While it is the doctor's primary duty to provide good medical care, this in itself is not enough. His obligations to his patients extend to his financial relations with them as well.

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A Medical Career

A surprising number of doctors are pessimistic about the future of medical practice. One said to your Observer recently: "The way things are going in this country I don't want my son to be a doctor. There is already too much interference with the practice of medicine and it looks to me there is going to be more. Soon the doctor will be told what he can and can't do for his patients. And who wants to be a doctor when that happens? I am sure I don't!"

Your Observer does not share this pessimism, although he readily admits that there are changes in prospect which will not be to the liking of many physicians. But there is no evidence to substantiate the prediction that they will make it impossible for the physician to render good medical service or that he will lack opportunities for professional advancement. These, after all, are the most important considerations in deciding upon a medical career.

Financial rewards may not be as great as in the past, although that is open to question. It remains to be seen, for example, what effect the trend toward third party responsibility for medical bills, i.e., prepayment plans, insurance companies, government agencies, labor unions, will have on physicians' incomes. It is your Observer's opinion that if this trend results in a reduction of gross incomes, it will be more than offset by the assurance that justifiable bills will be paid.

If the doctors' concern is that the Government will take over the practice of medicine, there is no evidence at the present time that this will occur in the foreseeable future. In fact, the possibility seems more remote today than at any time in the last two decades. It would require a social upheaval such as might possibly follow a devastating world war to bring it about.

Should it happen, it is of significance that not even the most radical proponents of a Government system of medical care have suggested that the doctors' freedom to practice medicine be restricted. In fact, they have said the quality of medical service would most certainly deteriorate under such conditions. Their sincerity may be questioned but their views are a matter of record.

Most important of all is the attitude of the American people toward regimentation. They have enjoyed a high standard of living far too long to accept second rate medical service. When they are ill they will insist upon having physicians who are responsible to them and to them alone. Those who would deny this need only familiarize themselves with foreign systems, where free choice of physician is limited or nonexistent, to be convinced of their unacceptability to the American people.

Whatever the future may hold, your Observer agrees with Dr. Walter C. Alvarez that opportunities for practitioners of medicine are still as great as they ever were. Dr. Alvarez said recently: ". . . there is no finer profession a young person can enter. It offers a high standing in the community and a wonderful opportunity to be helpful to others and to do great good. I know of no other work which gives such soul-filling and lifelong satisfaction. I know of no other vocation that rewards its practitioners with such a feeling of accomplishment. I know of no other profession that can give a parent so much pride in the achievements of his son or daughter."

There is every reason to believe that regardless of changes this will continue to be true.

T. W.

MEMBERSHIP

The following applicants for membership will be voted on at the meeting of the Executive Board, January 25, 1954.

For Active Membership

Melvin G. Alper, University of Virginia—1945
Samuel P. Bessman, Washington University (St. Louis)—1944
Josephine J. Buchanan, New York University—1944
William H. Bullock, Howard University—1944
David W. Harris, University of Pennsylvania—1946
Harry A. Horstman, Jr., Georgetown University—1942
Robert L. Krichmar, George Washington University—1951
Cyrus H. Maxwell, Harvard University—1928
Kline A. Price, Howard University—1933
Robert H. Syme, Jr., George Washington University—1947
Bertha E. Van Gelderen, George Washington University—1949
William H. Wallop, Columbia University—1949
Emerson A. Williams, Howard University—1943

For Associate Membership

W. Marion Falls, D.D.S., Georgetown Dental School—1928
Wilton M. Fisher, Baylor University—1942
Robert M. Greenberg, George Washington University—1941
Adrian Hogben, University of Wisconsin—1943
Robert J. Lukes, Loyola University—1947
Ergi J. Pesiri, Marquette University—1951
J. Herbert Smith, Queens University (Canada)—1933
J. Etienne Szollosi, University of Sorbonne (Paris)—1936

MILE POSTS TO HEALTH

The District of Columbia Survey of Medical Care for the Indigent and Related Services*

Dental Health

Several points seem to stand out as a result of the survey of dental care for indigents and dentally indigent.

1. No data are available on the needs of indigent or dentally indigent children or adults as specific groups.

2. White school children, as an entire group, seem to be receiving fairly adequate dental care.

3. Negro school children, as a group, are receiving far less dental care.

4. The Health Department clinics place large numbers of fillings and perform other services in an effort to prevent tooth loss among children. Of necessity, a large part of the work in most of the hospital and institutional clinics is of an emergency nature, with extractions being the most frequent type of operation.

5. Orthodontics is practiced in only one clinic.

6. Comparatively little prosthetic work is done. Dentures are made in limited numbers for (1) inmates of Glenn Dale Sanatorium and the Department of Corrections in their own clinics; (2) clients of the Public Assistance Division on a contract basis; and (3) inmates of certain homes, by donation of time and materials by private dentists.

7. A wide variety of criteria are used to determine eligibility for dental care. Some patients qualify by being inmates of institutions or by having a crippling condition. Inability to pay is the only requirement for many persons seeking dental care, but this requirement is interpreted in many ways. School children need only a written parental statement that dental care cannot be obtained. Patients at various clinics are screened and approved for treatment by the Public Assistance Division, the Bureau of Medical Assistance, the Hospital Service Agency, social service departments of hospitals, or other agencies.

Recommendations of the Dental Committee

1. That any agency expending public funds for medical care include dental care as a part of its health services, and that adequate funds be budgeted for dental services.

2. That dental rehabilitation services for eligible patients be supported by the District of Columbia Rehabilitation Service and that an adequate budget be provided for this purpose.

3. That trained dental assistants or clerical help be employed in dental clinics supported in whole or in part by public funds.

4. That a dental hygienist be assigned to each of the school and health center dental clinics to perform such tasks as prophylaxis and topical application of fluorides under the supervision of a qualified dentist.

5. That funds be made available for the provision of additional dental services for dentally indigent adults, either through the use of existing clinic or hospital facilities, or by payment for services in private offices in accordance with an approved fee schedule similar to that of the Veterans Administration.

6. That additional facilities and services be provided for the care of Negro children, especially in the newly populated areas.

7. That the necessary steps be taken to fully staff existing and future new facilities.

8. That such hospitals as meet the standards of the American Dental Association for dental intern and resident training be encouraged to institute and maintain such programs.

9. That adequate dental programs be encouraged and supported to provide competent dental services for those dentally indigent among prenatal, preschool, crippled children, cerebral palsy, oral cancer, and other groups.

10. That the organized dental profession continue to have adequate representation on advisory or policy-making groups.

Public Health Administration and Organization

RELATIONSHIP OF CONGRESS AND COMMISSIONERS TO HEALTH DEPARTMENT

1. *Congress and Commissioners should be made aware of health problems.* Congress and the District

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* Abbreviated portions of the report of the Survey have been appearing in the Medical Annals of the District of Columbia from month to month. This is the seventh and last installment.

of Columbia Commissioners both should be made adequately aware of District health problems through improved liaison with the Health Department and Board of Health as previously proposed. Both Congress and the Commissioners should see to it that adequate appropriations are made available to the Health Department and to the hospitals so that the full benefit of current knowledge in the field of medicine may be brought to bear to prolong and improve the health of residents of this community.

2. *Flexibility in Commissioners' Orders.* Commissioners' Orders in regard to administrative policies should have sufficient flexibility to permit the Director of Public Health to exercise professional judgment and discretion to administer the Health Department in the best interests of the community as a whole.

3. *Relationships with other District offices.* In the relationships existing between the offices of the Commissioners and the Health Department, it is recommended that practices and procedures be established to facilitate easy and expeditious handling of matters pertaining to personnel, finance, and general administration.

4. *Assign Corporation Counsel.* It is recommended that adequate assistance from the Office of the Corporation Counsel be assigned to the Health Department (as was done in the Board of Public Welfare) and that the person so assigned be delegated responsibility for working out all legal problems of the Health Department.

ORGANIZATION OF THE HEALTH DEPARTMENT

1. *Pyramidal pattern of organization.* It is recommended that there be developed a pyramidal pattern of organization and grouping of services in line with their functions to provide better coördination of these services within the Health Department. Within such pyramidal patterns, key positions should be given adequate ratings and salaries commensurate with their duties and responsibilities. Furthermore, higher ratings should be assigned in those categories that are presently rated so low that it is difficult to recruit personnel of higher caliber.

2. *Duties and responsibilities.* It will be necessary under the pyramidal pattern that the duties and responsibilities of the Director of Public Health, the Assistant Director(s) of Public Health, and the executives who report to them be redefined. Authority and responsibility should be delegated to the appropriate levels in keeping with good administrative practice.

3. *Health council.* There should be developed within the community a health council representing the many interested groups. A recommendation that the Health Section of United Community Services be strengthened to become a more adequate community health council is included in the report of the Committee on General Medical Care for the Indigent.

4. *Mental health program.* A comprehensive and coördinated mental health program should be developed under the direct supervision of a single authority within the Health Department. This will necessarily involve strengthening the budget and at the same time fitting into one pattern the care of the mentally ill at St. Elizabeths Hospital and in the Psychiatric Unit at Gallinger Hospital, the activities and practices of the Commission on Mental Health, the psychiatric clinic affiliated with the courts, and the Alcoholic Rehabilitation Program. This will also include reëvaluation of the program for the mentally retarded in the community.

5. *Tuberculosis program.* A comprehensive and coördinated tuberculosis program should be developed under the direct supervision of a single authority in the Health Department, operating with an advisory committee. This person would be concerned with all matters relating to tuberculosis control policy in the community, including Gallinger Hospital, Glenn Dale Sanatorium, outpatient clinics, educational programs, and all community planning and activities.

6. *Social service.* Social service has a vital place in the medical care program for the indigent. Public health nurses at present are devoting a great deal of time to social service work. It appears advisable to make a delineation between public health nursing and social service work, so that the respective skills of persons in the two professions may be effectively used.

It is further recommended that a Social Service Unit be established in the Health Department.

7. *Budgets.* The budgets of the Health Department, Gallinger Municipal Hospital, and Glenn Dale Sanatorium should be consolidated into a single appropriation, so that improved coördination of the

community's public health programs may be effected.

8. *Administrative manual.* An administrative manual or volume of standing orders should be prepared and made available to all bureau chiefs and hospital superintendents so that they may know what performance is expected of them by the Director of Public Health and what they should do when they are confronted with various administrative problems.

9. *Health centers.* It is recommended that the further decentralization of Health Department services through the establishment of health centers be explored, giving consideration to their association with teaching institutions, hospitals, and availability to the people who will benefit. It is urgent that the present hazardous facilities at the Polk Health Center be replaced.

MEDICAL CARE FOR THE INDIGENT

1. *Coördinated plan for medical care.* A coördinated plan for medical care of the indigent is required to assure continuity and high quality of care for the patient, to meet the needs of the District for training of professional students and graduates, and to make the most effective use of facilities, funds and personnel. The plan should be comprehensive enough to include preventive services, hospitalization, ambulatory care, home care, nursing home care, and rehabilitation, and should safeguard for the patient the right of free choice of hospital or clinic within the group of institutions coöperating with the Health Department in providing medical care for the indigent. The policy of concentrating indigent patients at Gallinger Hospital should be abandoned.

2. *Schedule of eligibility.* The schedule of financial eligibility governing admissions to hospitals at municipal expense should be revised immediately and annually thereafter to conform with changes in the cost of living as reported by the Bureau of Labor Statistics. The Health Department should take advantage of the clause which permits exceptions to the income and residence eligibility provisions in the Commissioners' Order of 1946 so as to correct inequities as they arise.

MUNICIPAL HOSPITALS

1. *Medical schools.* Within the administration of Gallinger Municipal Hospital, the responsibility of the three medical schools for the care of patients should be carefully delineated and definite responsibility for adequate medical care be fixed as between the staff of the Hospital and the representatives of the schools.

2. *Bed occupancy, Gallinger Municipal Hospital.* Since the bed occupancy at Gallinger Hospital is rather low and since Gallinger Hospital can make available more than 100 beds for the care of tuberculosis patients, it is recommended that an immediate emergency request for additional personnel and supplies with which to operate additional beds be submitted to the Commissioners and to Congress.

3. *Municipal hospital.* It is recommended that the administration of all municipal hospitals continue to remain in the Health Department.

BOOKS RECEIVED

Acknowledgment is made of the following books which have recently been received. Selections will be made for more extensive review in the interests of our readers and as space permits. Physicians are urged to submit reviews of additional current books which, in their opinion, merit comment.

Managing Your Coronary. WILLIAM A. BRAMS, M.D. Illustrations by Hertha Furth. Price, $2.95. Pp. 158. Philadelphia: Lippincott, 1953.

Fundamental Psychiatry. JOHN R. CAVANAGH, B.S., M.D., F.A.C.P., K.S.G., Diplomate of the American Board of Neurology and Psychiatry; Special Lecturer in the School of Sacred Theology and in the Department of Psychology, Catholic University of America; Member of the Commission of Mental Health, District of Columbia; Associate Clinical Professor, Georgetown University Medical School; Former Lecturer in Psychiatry, National Catholic School of Social Service; Former Commander, Medical Corps, United States Navy; AND JAMES B. McGOLDRICK, S.J., S.T.D., PH.D., Professor and Head of the Department of Psychology, Seattle University. Price, $5.50. Pp. 582. Milwaukee: Bruce, 1953

Films in Psychiatry, Psychology and Mental Health. ADOLF NICHTENHAUSER, M.D., MARIE L. COLEMAN, AND DAVID S. RUHE, M.D., Medical Audio-Visual Institute of the Association of American Medical Colleges. Price, $6.00. Pp. 269. New York: Health Education Council, 1953.

News and Personals

The American College of Surgeons is scheduling six Sectional Meetings between February 1 and May 19, 1954, in different parts of the United States, Canada and London, England. The meeting most accessible to Washington physicians will be held in Charlotte, North Carolina, February 1–3. Inquiries regarding these meetings may be addressed to D. H. Prather Saunders, Associate Director, American College of Surgeons, 40 East Erie Street, Chicago 11, Illinois.

The American Medical Association is planning a 13-day **Hawaiian Holiday Tour** which will follow the annual Convention in San Francisco, June 21–25, 1954. The party will leave San Francisco aboard the Pan American Airways Stratoclippers and United Air Lines Stratocruisers at 11:45 p.m., June 25, the closing day of the Convention, and will arrive in Honolulu early the next morning. Guests will be lodged at the beautiful Royal Hawaiian Hotel on Waikiki Beach during their 8-day stay on the Islands. The return trip will be made on the Matson liner, *S.S. Lurline*, which leaves the Islands on July 3, and is scheduled to arrive in Los Angeles on July 8. All reservations are being handled by W. M. Maloney, General Agent, Room 711, 105 West Adams Street, Chicago, Ill.

The Hawaii Medical Association will entertain the visiting physicians during their stay on the Islands. The semi-annual meeting of the Association, an organization of 518 physicians, will be held during the visit and physicians will be invited to attend any of the meetings.

The American Foundation for Allergic Diseases has been established with offices at 525 Lexington Avenue, New York City, under the joint sponsorship of the American Academy of Allergy and the American College of Allergists. Incorporated under the laws of New York State as a national, nonprofit, voluntarily-supported organization, its aims are: to promote through public education an accurate understanding of the problem of the allergic diseases; to inform and educate the medical profession in the problems of allergy; to coöperate with medical institutions, hospitals and other organizations in the development of facilities for the treatment and prevention of allergic diseases; and to provide facilities for research, including fellowships and residencies.

Individuals and organizations with an interest in medical education may become members of the **Association of American Medical Colleges** as a result of changes made in its constitution at the 64th Annual Meeting of the Association in Atlantic City, N. J., October 26–28. The institutional membership has been limited to accredited medical schools. Membership is now open to medical school faculty members and others professionally linked to medical schools for a fee of $10 per year. Sustaining memberships, at $1,000 a year, may be held by interested organizations.

The Executive Board of the Medical Society of the District of Columbia held its regular meeting, October 26. The Board voted at this meeting to extend an invitation to the American Academy of General Practice to hold its 1956 meeting in Washington.

Approval was given the action of the Medical Bureau Committee in authorizing the following increase in rates for BUREAU service, effective October 15: Alternate Listing Service, from $4.00 to $6.00 per month; Telephone Secretarial Service, from $8.00 to $10.00 per month.

The Board approved the following nominations to the Obstetrical Board, submitted by the Chairman, to serve for a period of three years: Dr. C. K. Fraser, Chairman; Dr. J. Bay Jacobs, Secretary; Drs. Raymond T. Holden, Andrew A. Marchetti, Ella Oppenheimer, John L. Parks, Alvin F. Robinson (representing the Medico-Chirurgical Society of D. C.), and Coleridge Gill (representing Howard

CALENDAR OF MEETINGS
October 16–November 15, 1953

October 16	Committee on Constitution and By-laws Society of Registered X-ray Technicians of Washington
October 17	Potomac District, American Association of Medical Social Workers
October 19	Obstetrical Board Society of Registered X-ray Technicians of Washington
October 20	Grievance Committee D. C. Chapter, American Academy of General Practice
October 21	Committee on Constitution and By-laws Section on Radiology
October 22	Committee on Public Information
October 26	Executive Board
October 27	Committee on Alcoholism Grievance Committee Committee to study proposed regulations governing maternity and newborn care in hospitals Section on General Practice
October 28	Lay Society, Diabetes Association of D. C.
October 29	Graduate Nurses' Association
October 30	Medical Bureau Committee
November 2	Committee to study proposed regulations governing maternity and newborn care in hospitals Washington Orthopedic Club
November 3	Committee to study proposed regulations governing maternity and newborn care in hospitals Women's Medical Society
November 4	Medical Society Symposium, "Look Again, Doctor" Executive Board, Woman's Auxiliary
November 5	Committee on Group Insurance Clinical Society, Diabetes Association of D. C. Executive Committee, D. C. General Hospital
November 6	Committee on Coöperation with D. C. Bar Association Section on Neurology and Psychiatry
November 9	Section on Anesthesiology Georgetown Medical Alumni Association
November 10	Committee on Blood Subcommittee on Mental Health Medical Officers' Reserve Units
November 12	Committee on Veterans Affairs Steering Committee, Physician-Veterans of World War II
November 13	Washington Psychiatric Society

University School of Medicine).

The following committee appointments submitted by President Ramsey were approved: Dr. Charles P. Ryland, to Medical Bureau Committee; Dr. Morris Chase, to Subcommittee on Child Welfare; Drs. Brooks G. Brown and U. V. Wilcox II, to Committee on Professional Liability Insurance, Dr. Brown for a 3-year term and Dr. Wilcox for a 1-year term; Dr. Richard E. deButts, to the Ruffin Bequest Committee for a 1-year term. Dr. Addison M. Duval, a member of the Public Health Committee, was designated Vice Chairman of the Committee.

Dr. Leonard A. Scheele, Surgeon General of the Public Health Service, was installed as the **new President of the Association of Military Surgeons of the United States** at Honors Night Dinner, the concluding event of the 60th Annual Convention of the Association, which was held at the Hotel Statler, November 9–11. The guest of honor and principal speaker for the occasion was Mr. Charles E. Wilson, Secretary of Defense. **Dr. John W. Cronin,** Medical Director, Chief of the Public Health Services, Division of Hospital Services, National Institutes of Health, PHS, was one of the four who received the Founders Medal, which is given to members for outstanding contributions to military medicine and conspicuous service to the Association. Dr. Cronin is an Associate member of the District Medical Society.

The opening scientific papers, November 9, were given by the four Surgeons General of the Army, Navy, Air Force and Public Health Service. The subjects presented were: "Recent Advances in Military Medicine," Major General George E. Armstrong, MC, USA; "Military Medicine of the Future," Rear Admiral Lamont Pugh, MC, USN; "Military Medicine and the Air Force," Major General Harry G. Armstrong, MC, USAF; and "Military Medicine and the U. S. Public Health

Service," Dr. Leonard A. Scheele.

The Departments of Surgery at George Washington and Georgetown University Schools of Medicine were represented on the program by Dr. Brian Blades, of George Washington, who spoke on "Importance of Tracheotomy in Acute Ventilatory Distress," and by Dr. Robert J. Coffey, of Georgetown, who gave an address on "Surgical Treatment of the Complications of Post-hepatitis Cirrhosis."

Captain George Raines, MC, USN, Executive Officer of the U. S. Naval Hospital, Portsmouth, Va., discussed "Psychiatric Selection for Military Service" on November 11. Captain Raines is an Active member of the District Medical Society.

Rear Admiral W. McK. Craig, MC, USNR, of Rochester, Minn., President of the Association of Military Surgeons, presided at a panel meeting, November 11, on "Medical Manpower—Needs and Utilization." The theme was presented by Dr. E. J. McCormick, President of the American Medical Association. Dr. Melvin A. Casberg, Assistant to the Secretary of Defense, discussed "Medical Manpower and Utilization—OSD Viewpoint," and Brigadier General Howard A. Rusk, MC, USAF, Chairman of the Health Resources Advisory Committee, spoke on "Federal Health Personnel—Needs and Utilization." Their papers were discussed by Dr. Morris Fishbein; Dr. Herbert P. Ramsey, President of the District Medical Society; Major General Howard McC. Snyder, MC, USA, Physician to the President; Dr. Chester S. Keefer, Assistant to the Secretary, Department of Health, Education and Welfare; and Dr. Paul R. Hawley, Director of the American College of Surgeons.

Another section of the program of interest to Washington physicians was in the field of pharmacy. Colonel F. Royce Franzoni, MSCR, USA, President of the American Pharmaceutical Association, and Dr. Robert Fischelis, Secretary of the APA, discussed "Utilization and Training of Pharmacists." Mr. Franzoni is an Associate member of the District Medical Society.

A sizable delegation of Washington physicians attended the **47th Annual Meeting of the Southern Medical Association** in Atlanta, Ga., October 26-29. Members of the District Medical Society presented eight papers before six of the Sectional Meetings. Titles of papers and their authors were:

Section on Medicine: "Artificial Kidney" in a Panel Discussion on Use of Newer Therapeutic Agents, Dr. Laurence H. Kyle

Section on Pediatrics: Chairman's Address, "Developing Problems in Pediatric Practice," Dr. Preston A. McLendon; "Iron Deficiency Anemia in Infancy and Childhood: A Controlled Study of the Pattern of Response in 62 Treated Patients," Dr. John P. McGovern

Section on Surgery: "The Use of Vascular Graft in the Treatment of Obliterative Vascular Diseases and Aneurysm," Drs. Charles A. Hufnagel and Pierre Rabil; "The Relationship of Acute and Chronic Cholecystitis to Acute Pancreatitis," Dr. Robert J. Coffey

Section on Orthopedic and Traumatic Surgery: "Hip Prosthesis," Dr. Leonard T. Peterson

Section on Obstetrics: "A New Method of Determining Tubal Patency and Tubal Ciliary Activity," Dr. Joseph B. Sheffery

Section on Ophthalmology and Otolaryngology: "Accommodative Convergent Squint: Diagnosis and Treatment," Dr. William J. G. Davis

The following Washington physicians were among the scientific exhibitors:

Drs. Lester S. Blumenthal and Marvin Fuchs, George Washington University Hospital: Tension Headache

Dr. Joseph M. LoPresti, Children's Hospital and George Washington University School of Medicine: (1) The Caffey-Smyth Syndrome, and (2) The Reticuloendothelioses

Drs. Jacob J. Weinstein, Joseph H. Roe and William Liu, George Washington University School of Medicine and D. C. General Hospital: Clinical Use of Dextran

Colonel Joe M. Blumberg, Walter Reed Army Medical Center, and Dr. H. E. Nieburgs, Medical College of Georgia: Detection and Diagnosis of Asymptomatic Uterine Cancer by Exfoliative Cytology

Drs. Oscar B. Hunter, Jr., and Richard H. Fischer, Doctors Hospital Research Foundation: Control of Cortisone Therapy in Rh Incompatibilities

Dr. Helen Gladys Kain, a Councilor of the SMA, attended the meetings of the Council.

Colonel Joe M. Blumberg, of Walter Reed Army Medical Center, and Dr. N. B. Baroody, Charleston, S. C., presented a paper on "Abrasive Balloon Detection of Gastric Cancer" before the Southern Society of Cancer Cytology, which met conjointly with the SMA, October 26.

Several members of the District Medical Society participated in the **Antibiotic Symposium,** October 28, 29 and 30, which was sponsored by the Division of Antibiotics, Food and Drug Administration, Department of Health, Education and Welfare, in collaboration with the journal *Antibiotics and Chemotherapy*. The Symposium was held in the Department's auditorium.

Dr. Sidney Ross, of Children's Hospital, was discussant of the first paper, "Clinical Uses of Presently Available Antibiotics," by Dr. Maxwell Finland of Harvard University.

Papers authored or co-authored by members of the District Medical Society were:

"Antibiotics Other than Penicillin in the Treatment of Syphilis," Dr. Monroe J. Romansky, George Washington University School of Medicine

"A Clinical Study of Streptohydrazid in Pulmonary Tuberculosis," Drs. Howard M. Payne, Constance C. Quarles, Oscar Ellison, and K. Albert Harden, Howard University School of Medicine

"The Effect of Chloramphenicol on the Bone Marrow in Infants and Children," Drs. John Doyle, David Bell, Sidney Ross, and E. Clarence Rice, Children's Hospital

"The Treatment of Hemophilus Influenzae, Type b Bacteremia and Pneumonia with Erythromycin," Drs. John P. Nasou, Monroe J. Romansky, and J. Frederick Barr, George Washington University Medical Division, District of Columbia General Hospital, and the Department of Medicine, George Washington University School of Medicine

"Effect of Nephrectomy on Azotemia Associated with Oxytetracycline (Terramycin) Administration in Rats," Dr. Jeanne C. Bateman, George Washington University Cancer Clinic

The new **Armed Forces Institute of Pathology** at Walter Reed Army Medical Center was formally dedicated, October 20, "to science and the cause of humanity" by Dr. Melvin A. Casberg, Assistant Secretary of Defense (Health and Medical), who traced the history of the Institute from its beginning as the Army Medical Museum during the Civil War. Dr. Casberg was assisted in the cornerstone-laying ceremonies by Brigadier General Raymond O. Dart, a former Director of the Institute. Sealed into the cornerstone along with many Army documents were a bone sample from the Civil War and a tissue specimen from an atomic bomb casualty of World War II.

A massive windowless structure, one of the first Government buildings designed to resist atom-bomb attacks, the building will cost $7,130,000 and is scheduled for completion in May, 1954. It replaces the older structure on Independence Avenue near the Smithsonian Institution. The chief function of scientists in the new building will be to examine samples of human tissue sent in from military posts as part of a program for aiding diagnosis, treatment, and understanding of various diseases.

The Program Committee of the Medical Society of the District of Columbia is sponsoring a **speaking course for physicians** under the direction of Mr. Russell Conwell Ross. Using a technic known as the Speak-with-Ease Method, Mr. Ross is holding 12 weekly sessions, which began on November 24. The instructor is a graduate of the University of Iowa and was for several years a member of the field staff of the Public Relations Division of the National Association of Manufacturers. The fee for the course is $144.00.

The Medical Society's auditorium was well filled, Wednesday evening, November 4, by members of the Society and their wives for the **Symposium "Look Again, Doctor!"** President Herbert P. Ramsey was moderator for the meeting. The topics presented by members of the Society were as follows:

"Have You Looked at Your Office Lately?" Dr. Paul F. Jaquet, Jr.

"Patients Are People," Dr. Josephine Renshaw, Chairman of the Committee on Public Information

"What You Owe Other Doctors," Dr. Zigmond M. Lebensohn

"'A Soft Answer . . . ,'" Dr. Hugh H. Hussey, Chairman of the Program Committee

"What the Grievance Committee Hears," Dr. Frank D. Costenbader, Chairman of the Grievance Committee. Since Dr. Costenbader was unable to be present, the paper was read by Dr. A. Magruder MacDonald, a member of the Committee.

"Have You Looked at Your Secretary Lately?" Dr. Darrell C Crain

George Washington University School of Medicine announces staff promotions for 18 members of its faculty. Dr. Virgil H. Cornell has been appointed Professor of Pathology; Dr. Reginald S. Lourie is now Associate Clinical Professor of Pediatric-psychiatry and Dr. John A. Washington, Associate Clinical Professor of Pediatrics.

New Assistant Clinical Professors are Drs. Aubrey D. Fischer (otolaryngology), William A. Howard (pediatrics), Richard W. Wilkinson (ophthalmology), and Jonathan M. Williams (neurological surgery). Dr. William G. McCarten is Assistant Professor of Bacteriology.

New Associates are Drs. William P. Chalfant, Carmen R. Naples and Walter J. Romejko (ophthalmology), Allan B. Coleman (pediatrics), Henry D. Ecker, Jack J. Rheingold and Irene G. Tamagna (medicine), Gordon S. Letterman (surgery), James J. McFarland (otolaryngology), and George D. Weickhardt (neurology).

Georgetown University announces the following staff appointments, which were made on September 15, in the School of Medicine:

Dr. Charles A. Hufnagel, Associate Professor of Surgery
Dr. Tiffany Lawyer, Associate Professor of Neurology
Dr. Milton Shy, Clinical Associate Professor of Neurology
Dr. Maitland Baldwin, Clinical Associate Professor in Neurology in the Department of Surgery
Dr. Bernard Nagler, Assistant Professor of Clinical Neurology
Dr. William Hart, Clinical Associate Professor of Ophthalmology
Dr. James Boland, Adjunct Instructor in Surgery
Dr. Gilbert Mellin, Clinical Instructor in Pediatrics
Dr. Jorge Huertas, Research Assistant Professor in Neurology and Director of Neurological Research Laboratory
Drs. William H. Cooper, August Kramm, Joseph M. O'Neil, Leon A. Martel, Jean E. Paquin, and Robert L. Regan, Clinical Instructors in Obstetrics and Gynecology
Drs. Leonard Berg, Lewis Rowland, and Marvin Korengold, Clinical Instructors in Neurology
Dr. Zack W. Sanders, Assistant in Neurology

The Section on Neurology and Psychiatry of the District of Columbia Medical Society, the Philadelphia Neurological Society, and the Neuropsychiatric Section of the Baltimore Medical Society held its annual tri-state meeting in the District Medical Society's building, November 6. The following program was presented during the afternoon:

"Stenosis of the Aqueduct of Sylvius: Surgical Experiences," Dr. James Peter Murphy, Chairman of the D. C. Section on Neurology and Psychiatry
"Cogan's Syndrome (Nonluetic Interstitial Keratitis with Deafness)," Dr. Harold Stevens
"Changes in Carbohydrate and Protein Metabolism Following Transection of the Midbrain," Drs. William T. Spence, David McK. Rioch, Webb Haymaker, Evelyn Anderson, K. Knowlton, and G. L. Laqueur
"Pneumocephalus and Rhinorrhea: Surgical Treatment," Dr. Hugo V. Rizzoli
"Temporal Lobe Seizures in Monkeys," Drs. Francis M. Forster and Jorge Heurtas

Dr. Murphy presided at the dinner in the Pan American Room of the Mayflower Hotel, which concluded the day's program.

COMING MEETINGS

THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA

January 6, 8:00 p.m.: Symposium on "Emotional Problems of Adolescents"

February 16, 17, and 18: ANNUAL MIDWINTER SEMINAR

March 3, 8:00 p.m.: Business meeting, plus "Stump the Medical Experts"—an opportunity to match wits with a panel of experts on things medical.

May 5, 8:00 p.m.: ANNUAL BUSINESS MEETING

The Section on Ophthalmology held a dinner meeting at the Kennedy-Warren, November 10. The guest speaker was Dr. Willis S. Knighton, of New York City, who presented the topic, "Glaucoma: Office Examination and Treatment Indicated for Surgery."

The Scientific Council of the Washington Heart Association presented the following program as the first of a series on current trends in heart disease treatment and research. The meeting was held in Hall A of George Washington University School of Medicine, October 28:

"Current Concepts of the Diagnosis and Management of Cardiovascular Syphilis," Dr. Elizabeth Hill
"Metastatic Heart Disease: Neoplastic Invasion of the Heart and Pericardium," Drs. Gene Cohen, Thomas M. Peery, and John M. Evans
"Brucellosis and Heart Disease," Dr. Thomas M. Peery
"The Correlation of Needle Biopsy Findings and Renal Function Studies," Drs. Alvin E. Parrish and J. S. Howe
"Preliminary Studies with Ballistocardiography in Neurocirculatory Asthenia," Drs. Ludwig G. Lederer and John E. Smith

The second meeting of the **George Martin Kober Medical Society** was held at the Army-Navy Club on November 16, with Dr. John C. Murphy as host. The topic for the evening's program, "The Primary Vascular Eye Lesions of Diabetes," was presented by Dr. L. Conner Moss.

The Graduate Nurses' Association of the District of Columbia celebrated its golden anniversary with a banquet at the Hotel Statler, November 5. During the program Past Presidents of the Association reviewed the organization's history. Lt. Colonel Thelma Munn, of the Army Nurse Corps, was elected President. She is chief of the personnel division of the Army Nurse Corps procurement section.

The Secretary of the **Metropolitan Health Officers' Association** has called the attention of the ANNALS' Editorial Offices to the fact that this organization has not been listed among the smaller medical societies of Washington and vicinity. Dr. Daniel L. Seckinger is President and Dr. Ralph G. Beachley, Secretary, of the Association. Meetings are held 4 times a year, in January, April, July and October, at the Washington Golf and Country Club.

The Washington Psychiatric and Psychoanalytic Societies held a joint meeting in the Medical Society's auditorium, November 13. Dr. Frederick C. Redlich, Professor of Psychiatry at the Yale University School of Medicine, was the guest speaker; his subject, "Dynamics of Humor and Mental Disorders." Discussants were Dr. Zigmond M. Lebensohn, Associate Professor of Psychiatry, Georgetown University School of Medicine, and Dr. Margaret J. Rioch, Clinical Psychologist at Chestnut Lodge.

Officers of the **Gorgas Memorial Institute of Tropical and Preventive Medicine, Inc.** were reëlected at a meeting of the Board of Directors, October 30. They include Colonel Joseph F. Siler, President, and Dr. Walter A. Bloedorn, Secretary.

Among the directors present at the meeting were the following members of the Medical Society: Major General George E. Armstrong, Surgeon General of the Army; Rear Admiral Lamont Pugh, Surgeon General of the Navy; Dr. Wallace M. Yater, representing the President of the American College of Physicians; Dr. Bloedorn; Dr. Howard T. Karsner; and Dr. Fred L. Soper.

George Washington University has received a $25,000 grant from the **National Heart Institute** of PHS for use in teaching medical studients the latest methods in diagnosing and treating heart diseases. The Public Health Service first granted funds for this training and teaching program in 1952. It is administered under the direction of Dr. John M. Evans, Associate Clinical Professor of Medicine, and Dr. Albert D. Kistin, Associate in Medicine.

George Washington University has also received a $12,000 grant for arthritis research from the **Eugene and Agnes Meyer Foundation.** The grant will aid in equipping and operating an arthritis and rheumatic disease research laboratory at the Hospital. Dr. Thomas McP. Brown, Professor of Medicine at the University, is Director of the University's arthritis research program. Working with him in this research are Dr. Ruth Wichelhausen, Assistant Director of Arthritis Research, and Dr. Harold Clark, biochemist.

New research developments in the field of muscular dystrophy to be carried out in the Washington area were announced, November 4, at a dinner at the YWCA, which launched a month-long drive for funds. Speakers at the dinner meeting included Dr. Francis M. Forster, Dean of Georgetown University School of Medicine; Dr. Tiffany Lawyer, in charge of Georgetown Hospital's muscular dystrophy clinic; and Dr. Milton Shy, Clinical Director of the Institute of Neurological Diseases and Blindness, Public Health Service, Bethesda, Md. The goal of the national drive is $5,000,000.

The Baltimore-Washington Dermatologic Society has elected new officers. They are:

Dr. Israel Zeligman, Baltimore, *President*; Dr. Jack L. Derzavis, Washington, *Vice President*; Dr. R. C. V. Robinson, Baltimore, *Secretary-Treasurer*.

Emergency Hospital held its first **Hobby Show** on October 28 and 29 in the Nurses Home adjacent to the Hospital. Four classes of exhibit were on display: painting and photography, home crafts, collections, and horticulture. Among the most interesting of the exhibits were Dr. Edgar McPeak's orchids, the stamp collection of Mr. Charles C. Sellers, Assistant Administrator of the Hospital, and the leather tooling exhibited by Dr. S. George Anagnos, resident physician.

At the annual fall meeting of the **Metropolitan Washington Tuberculosis Conference,** October 27, Dr. Ralph G. Beachley was elected President for the ensuing year. This group is sponsored by the Tuberculosis Associations of the District of Columbia, Maryland and Virginia. Dr. Beachley is Director of Public Health in Arlington County, Virginia.

Drs. Roy G. Klepser and George E. Beauchamp were elected Vice Presidents and Rebecca Sweeney, R.N., Secretary. Members of the Executive Committee include Dr. Richard E. deButts, Ivan A.

Booker, Dr. Howard M. Payne, and Miss Frances Clay.

Acknowledgment is made in these columns to officers of **Peoples Drug Stores** for their generosity over many years in providing the Official Program for the Medical Society's ANNUAL SCIENTIFIC ASSEMBLY as well as for sponsoring the cocktail party preceding the Annual Banquet. For the 24th ASSEMBLY Peoples Drug Stores were co-sponsors of the enlarged Public Health Exhibit and provided attractive publicity through Washington newspapers. Without the fine support of Peoples and other contributing firms and institutions, the ASSEMBLY could not have attained the prestige it carries among state medical meetings.

Dr. Francis M. Forster was invited to give the Ninth Annual Founders Lecture of the Medico-Chirurgical Society of the District of Columbia at Howard University School of Medicine, November 19. Dr. Forster's address was entitled "Medicine at Its Crossroads."

Dr. Herman E. Hilleboe, Commissioner of New York State Department of Health, was chosen President-elect of the **American Public Health Association** at its meeting in November, to take office as President at the annual meeting next year. Dr. Hilleboe was an Associate member of the District Medical Society from 1944 to 1948, when he headed the Tuberculosis Control Division in the U. S. Public Health Service.

Dr. Winfred Overholser, Superintendent of St. Elizabeths Hospital, gave the C. C. Beling Memorial Lecture at the Newark (New Jersey) Academy of Medicine, November 11, under the auspices of the New Jersey Neuropsychiatric Association. His topic was "Medical Expert Testimony and Its Improvement."

On November 18 Dr. Overholser took part in the University of the Air series broadcast over Station WCFM; the title of his talk was "Psychiatry and the Law."

Rear Admiral Lamont Pugh, Surgeon General of the Navy, was honored at the recent Clinical Congress of the American College of Surgeons by being elected for a 3-year term to the Board of Governors. Admiral Pugh will represent the Medical Department of the U. S. Navy.

Dr. Wallace M. Yater, Director of the Yater Clinic, was recently appointed Consultant in Internal Medicine to the Clinical Center of the National Institutes of Health by Dr. W. H. Sebrell, Director of the Institutes. Dr. Yater was appointed a member of the National Advisory Health Council to the Public Health Service by Surgeon General Leonard A. Scheele.

Dr. C. Herbert Marshall was guest of honor of the Rock Creek Citizens' Association at a testimonial dinner in the Dunbar Hotel, October 29. Dr. Marshall has served as President of the Association for the past 19 years. In a program entitled, "This is your life," speakers representing various phases of the physician's life lauded his accomplishments. Taking part in the program were representatives of the Stevens Elementary School, the old M Street High School, Howard University, and church, civic and fraternal organizations of which he is or has been a member. The Association, through its Vice President, Mrs. Gertrude T. Waters, presented him with a tape recorder.

Dr. Marshall graduated from Howard University School of Medicine in 1924. He was Chairman of the Board of Trustees of the National Medical Association from 1944 to 1947 and was its President in 1949–50. On November 18 he was elected to serve his twentieth term as President of the Rock Creek Citizens' Association. He is President of the Federation of Civic Associations and a sponsor of the newly formed Junior Citizens' Association of Washington.

Dr. Robert E. Moran attended the Annual Meeting of the American Society of Plastic and Reconstructive Surgery, in Coronado, California, where he presented a joint report, November 5, on a new operation, utilizing plastic surgery technics, which will increase the supply of blood to the heart of persons suffering from coronary insufficiency. Co-authors of the report were Drs. Charles G. Neumann, Jerrold von Wedel, Jere W. Lord, Jr., and J. William Hinton, of New York City, who have worked with Dr. Moran on this operation.

Dr. I. Phillips Frohman has been appointed a member of the Advisory Committee on Adult Health Education to the National Tuberculosis Association.

Dr. Harold J. Jeghers, Professor of Medicine, Georgetown University School of Medicine, was a guest lecturer at the 28th Clinical Congress of the Connecticut State Medical Society, which was held at the Yale University School of Medicine in New Haven, September 16 and 17. Dr. Jeghers discussed a case at the Clinico-Pathologic Conference and also gave a talk on the subject, "The Clinical Spectrum of the Pyelonephritis Problem."

Dr. Raymond A. Osbourn represented the Medical Society of the District of Columbia at the Eighth Annual Conference on Citizenship, which was held in Washington, September 17, 18 and 19.

Dr. Daniel F. Lynch, President-elect of the American Dental Association and an Associate member of the District Medical Society, participated recently in a half-day seminar on "Therapeutics of Oral Surgical Patients." Conducted at the Naval Dental School in Bethesda, Md., early in November, the Seminar was attended by dental officers of the Armed Forces and civilian dentists practicing in the Washington area.

Dr. Joseph L. Gilbert resigned his position as psychiatrist at the D. C. General Hospital, effective October 31, in order to head one of the psychiatric services at St. Elizabeths Hospital.

Dr. Gilbert began his services at the D. C. General Hospital in 1931. In 1933, on the resignation of the late Dr. D. Percy Hickling, he became District Alienist, a post he held for more than a decade.

Dr. Gerhart J. Gordon, Chief Medical Officer of the Hospital's Psychiatric Division, will assume responsibility for the duties relinquished by Dr. Gilbert.

Dr. Thomas McP. Brown, Professor of Medicine at George Washington University School of Medicine, was the main speaker at the Washington County Medical Society's meeting in Hagerstown, Md., October 22. Dr. Brown spoke on "A Concept of the Basic Mechanism of Management of Arthritis and Rheumatic Diseases."

Dr. W. Calhoun Stirling read a paper on "Removal of Ureteral Calculi—Report of 250 Cases" before the Uro-Surgical Society at Lake Placid Club, October 1.

Theodore Wiprud, Managing Editor, **and A. Louise Eckburg,** Assistant Editor, of the MEDICAL ANNALS, attended the State Medical Journal Conference for 1953, which was held at the AMA Headquarters in Chicago, November 9 and 10. The Conference was held under the auspices of the Advisory Committee of the State Journal Advertising Bureau, which represents 34 state medical journals covering 39 states.

Dr. W. R. Stovall, Chief of the Medical Division of the Civil Aeronautics Administration, was one of the guest speakers at the Annual Meeting of the Indiana State Medical Association in French Lick in October. Dr. Stovall, who is the immediate Past President of the Aero Medical Association, addressed the Section on Aviation Medicine, October 20, on "Medical Support of Civil Aviation."

Dr. Mary K. L. Sartwell has been elected a Fellow of the American Academy of Pediatrics.

Dr. Monroe J. Romansky discussed "The Trends in Antibiotic Therapy" at the monthly staff meeting of Sibley Memorial Hospital, November 10.

Dr. J. DeWitt Fox, Editor of *Life and Health,* and an Active member of the District Medical Society, is a resident in surgery at the Henry Ford Hospital in Detroit, Michigan.

In the *United States Defense Bonds Bulletin* of November 4, 1953, acknowledgment is made to **Dr. Roy L. Sexton** for his letter to members of the D. C. Medical Society, recommending Series H Bonds for medical men and other retirement-minded persons who want current income from investments. According to the *Bulletin,* Dr. Sexton, Chairman of its Medical Section, "has long been a booster for Savings Bonds."

Dr. E. Clarence Rice was honored for his work in raising money for the operating fund of Garfield Hospital School of Nursing. He was presented with a scroll at the School's charity ball at the Hotel Statler, November 4.

CORRESPONDENCE

CHICAGO, ILLINOIS, October 27, 1953

TO THE PRESIDENT OF THE MEDICAL SOCIETY OF THE DISTRICT OF COLUMBIA

DEAR DR. RAMSEY:

May I take this opportunity to say a few words about the excellent contribution your representative, Dr. George Maksim, made at the recent Fourth National Conference on Physicians & Schools, held at the Hotel Moraine, Highland Park, Illinois, Sept. 30–Oct. 2, 1953. The staff of the Bureau of Health Education of the American Medical Association realizes that any success the Conference may have achieved was due to the participation of the many high caliber people who came as representatives of the various agencies.

The excellent interprofessional relationships evidenced at the Conference are a tribute to the work of Dr. Maksim and to that of the many other fine people who attended. We believe that the growing understanding among the groups concerned with school health will lead to long-term improvement of child health throughout the United States.

A preliminary news release type of report on the Fourth National Conference on Physicians & Schools was sent to you recently. As soon as possible you will receive the more comprehensive printed proceedings. We are sure you will find these interesting reading.

We appreciate your making it possible for Dr. Maksim to attend the Conference and the contribution this has made toward progress in the field of school health.

Sincerely,
W. W. BAUER, M.D.
Director, Bureau of Health Education,
American Medical Association

WASHINGTON, D.C., October 15, 1953

DR. JOSEPHINE E. RENSHAW
CHAIRMAN, COMMITTEE ON PUBLIC INFORMATION

DEAR DR. RENSHAW:

On account of ill health I did not feel equal to attend the meeting of the Medical Society at which you made the presentation of the Award named after me. If I had been present I would probably have been too flabbergasted for utterance. I was naturally interested in the affair, accounts of which were given me by friends and the newspaper notices, with the picture of you making the presentation.

I wish to express to you and your committee my particular appreciation and gratitude for the distinguished honor which you conferred on me by giving it my name. It was an astonishing surprise, and I can scarcely realize that it is a reality rather than a dream.

So with thanks, and thanks, and personal regards and best wishes, I am

Gratefully and sincerely yours,
JOHN B. NICHOLS, M.D.

WASHINGTON, D.C., October 27, 1953

TO THE MANAGER OF MEDICAL BUREAU

DEAR MR. ZUPAN:

I was very pleased to learn about the new switchboard facilities at the BUREAU. Even with the slight increase in cost, your service is the biggest bargain the subscribers could ever hope to find. I have been a member of the MEDICAL BUREAU since coming to Washington and have found it to be of invaluable assistance to me in my practice.

The operators have always been most kind, courteous and solicitous of the welfare of the patients. On many occasions it often takes considerable ingenuity and patience to properly handle calls from people who are emotionally upset because of illness. The MEDICAL BUREAU operators have never been found wanting in this respect. They have handled my calls in a dignified, dependable manner and I am most grateful. They are a credit to the medical profession and particularly to the Medical Society of the District of Columbia.

I trust that the new equipment recently installed will materially facilitate the work of the BUREAU and make it possible to continue the excellent quality of service to an even larger number of subscribers.

Sincerely yours,
LEO J. SCHILDHAUS, M.D.

BOOK REVIEWS

Living with a Disability. HOWARD A. RUSK, M.D., Director of the Institute of Physical Medicine and Rehabilitation, New York University-Bellevue Medical Center and Medical Editor of *The New York Times*, AND EUGENE J. TAYLOR, M.D., Assistant Professor of Clinical Medicine and Rehabilitation, Institute of Physical Medicine and Rehabilitation, New York University-Bellevue Medical Center, in collaboration with MURIEL ZIMMERMAN, O.T.R., AND JULIA JUDSON, M.S. Price, $3.50. Pp. 207, with 282 photographs and line drawings. New York: Blakiston, 1953.

Ingenuity and inventiveness have long characterized the people of America. And the love of gadgetry betrays a desire to do things the easy way, in order to have more time for recreation. Here is a book that whets the appetite of the inventor, the gadgeteer, and the lazy person. With an unbelievable number of drawings, plans, and photographs and a minimum of text, the authors have produced a full-scale picture of aids to the handicapped. They have chosen the tried and proven from among the Goldbergian contraptions that deluge the Patent Office. From personal experience in making life easier for the lame, the halt and the blind, they have accomplished a minor miracle.

Proceeding from the simple to the complex, they show how a patient who is completely bedridden can employ mechanical aids with what is left of his powers and his coördinations to fill out his life and make the world a pleasanter place. They stress the point that the gadgets will not do the work by themselves, and that practice and persistence are necessary to master some of the more complex apparatus. However, for the severely crippled, even a long-handled, angled spoon that will make it possible for the patient to feed himself at his own desired rate may have the most fortunate effects upon morale. The text is simple, down-to-earth, and practical. Since we are constantly faced with an increasing number of handicapped, this is a book that deserves a place on the shelves of many people, physicians and patients alike.

WALTER FREEMAN, M.D.

Directory of Psychiatrists and Clinical Psychiatric Facilities in the Washington Area, 4th ed., 1953–54. HENRY P. LAUGHLIN, M.D., Editor; JAMES PATRICK SCANLON, M.D., Business Manager. Price, $1.00. Pp. 69. Washington: The Washington Psychiatric Society, Inc. (3118 New Mexico Avenue, N.W.), 1953.

Since 1948, when the first edition of this useful directory was published, there have been many additions to the number of psychiatric specialists in the Washington area, and in the numbers and addresses of psychiatric facilities. The present revision is therefore timely. No less than 377 psychiatrists are listed, with pertinent data as to society and hospital connections, specialty board certification, type of practice (general, institutional, analytic, etc.) and address (office and home) and telephone numbers. There are also listed the 26 psychiatric clinics and outpatient departments, with details as to staff, hours, eligibility, and so on.

The value of such a compendious and up-to-date directory to general practitioners, specialists in other fields of medicine, and the general public is obvious. We are indebted to Dr. Henry P. Laughlin, the editor, for the accomplishment of a most useful piece of work.

WINFRED OVERHOLSER, M.D.

LOUIS ANTHONY CORNET, B.S., M.D.
(1896–1953)

Dr. Louis A. Cornet, an Active member of the Medical Society of the District of Columbia, died, October 28, 1953, at his home, 1927 North Capitol Street, after a year's illness. He was formerly Chief of Staff of National Homeopathic Hospital.

Dr. Cornet was a native of Versailles, Indiana, born November 23, 1896, the son of a lawyer, Nicholas Cornet, and Rose Steinmetz Cornet. He received both his Bachelor of Science and Doctor of Medicine degrees from Georgetown University, the latter in 1921. After interning at Covington, Kentucky, he returned to Washington in 1922 and served about a year as alienist at the District of Columbia General Hospital.

Dr. Cornet specialized in obstetrics, maintaining his office in his home. He served on the medical staff of Homeopathic Hospital for more than 30 years and was Chairman of the Executive Committee from 1949 until 1952, when he retired because of ill health.

He was a member of the American Medical Association, the American Academy of General Practice, the Medical Society of the District of Columbia since 1938, and Phi Beta Pi medical fraternity.

A well known judge and breeder of dogs, Dr. Cornet was a member of the Old Dominion Kennel Club of Virginia and was a director of the Dachshund Club of America.

He is survived by his wife, Mrs. Mary Hurley Cornet; a son, Louis A. Cornet, Jr.; and two daughters, Alice Marie Cornet and Mrs. Rose Mary Burgher, all of Washington. He also leaves a brother, John L. Cornet, of Moline, Illinois.

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